

ARCHITECTURAL
TERRA COTTA
BROCHURE SERIES

VOLUME ONE



THE SCHOOL

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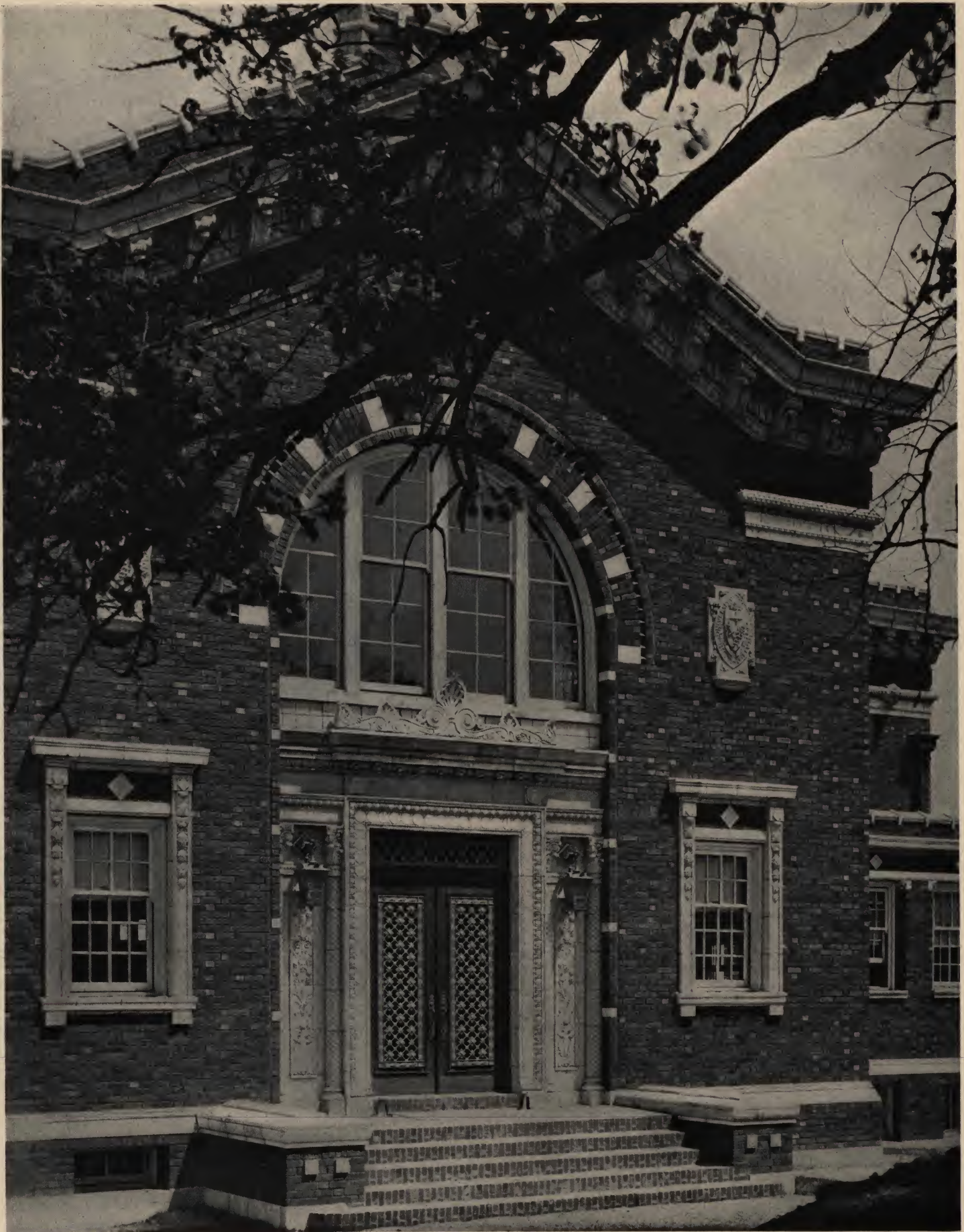
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DETAIL — UNIVERSITY OF CINCINNATI, CINCINNATI, OHIO

TIETIG & LEE — GARBER & WOODWARD, ASSOCIATE ARCHITECTS

ARCHITECTURAL TERRA COTTA

BROCHURE SERIES

Volume One—The School

In the main, we require from buildings, as from men, two kinds of goodness : first, the doing their practical duty well; then that they be graceful and pleasing in doing it ; which last is itself another form of duty. — John Ruskin.

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Foreword

THIS Brochure, which deals exclusively with the subject of schoolhouses, is the first of a series of booklets to be published by the National Terra Cotta Society, each one of which will treat a particular type of building. The complete series will comprise an authoritative and instructive presentation of the use of architectural terra cotta in Public, Institutional, and Mercantile structures.

The aim and purpose of this series of Brochures is to emphasize the merits and advantages of architectural terra cotta as a building material of sound structural value and to suggest its limitless possibilities as a decorative medium for the various types of buildings treated. It is hoped that a better understanding of this material and a larger appreciation of its qualities may result from these efforts.

For the purpose of illustrating a subject of such universal interest as the schoolhouse, it seemed desirable to include not only the highly complex manual training school and other larger schools of the city, but also the modest six or eight classroom school of town and country. Of the former, photographs showing the advantageous uses of architectural terra cotta were available without number, for it is well known how the majestic city school has kept pace with the artistic taste of a growing population — growing not only in size but in a better understanding of beauty as expressed in design and materials. Of the smaller type of school, however, such photographs were less easily obtained. It was decided to supply this deficiency by preparing a few suggestive sketches showing how peculiarly suited architectural terra cotta is to the requirements of the small school beautiful. These sketches make no attempt to invade the architect's province in any way whatsoever, but are intended merely to indicate the possibilities of architectural terra cotta in developing a more æsthetic and distinctive type of school building. They were prepared by a member of the architectural profession to whom terra cotta is a peculiarly sympathetic material and who is optimistic in the belief that its use will provide our communities with schools of ever-increasing attractiveness. Unpretending though these suggestions are, they sound emphatically the new note that rings throughout all modern school construction—the new note that has laid a ban on the old, uninteresting, and uninspiring type that most of us knew in childhood.

In suggesting the use of architectural terra cotta as the logical material in which to execute and embellish public school buildings, attention is called to the fact that this material has for many years met the most exacting requirements of American building practice, from the æsthetic and utilitarian points of view. By spreading a greater knowledge of terra cotta among those who exert an influence in the selection of building materials for schools, it is hoped that a conviction may be created that architectural terra cotta ought to be used wherever possible, irrespective of price, if the best results, all things considered, are to be obtained in the finished building. And one of the most important considerations is the modern theory that school buildings, in which children pass the most formative years of their lives, should offer surroundings that are visibly pleasant and ethically uplifting. So insistent is this new idea that no School Board can afford to turn a deaf ear to its appeal.

Schoolhouse Architecture and Its Influence on the Community

By FLETCHER B. DRESSLAR

Author of "American Schoolhouses" and Special Agent United States Bureau of Education

THIS is the age of schools and schoolhouses, as characteristically as the latter part of the Middle Ages was the period of churches and great church buildings. In each case the faith and fervor of the people can be read and fairly understood through a critical study of these objective results and the ideals for which they stand. It will not miss the mark very far to say that the ideals and feelings which we associate with the notion of popular education, are becoming suffused with a glow and zeal heretofore only found associated directly or indirectly with religious faith and religious propaganda. And something of the same spirit that once wrought to build a tabernacle or a cathedral, worthy of a dwelling place of the Most High, is seeking expression in furnishing to the youth of our land nobler temples in which their hearts, minds, and bodies may better adjust themselves to the demands of a practical civic brotherhood.

The problem, then, of building a schoolhouse to-day is in no small sense complicated by the growing tendency to use schoolhouses for worthy social work of all kinds. This tendency operates to bring school work into more vital touch with the real life of the world; and *vice versa*, it is bringing the American community into a more vital relation with the teachers and those who are responsible for schools and school organization. Schoolhouses, especially in the large cities, have come to be used night and day, summer and winter; vacation schools have been established, in which unusual programs of work and play have been introduced. For their successful consummation, such programs often demand equipment and accommodations not needed in the regular day schools. In planning even a country schoolhouse or village high school building, one must therefore think not only of the present requirements but also of the possible future needs of the community and enlarge his theories of the scope and purpose of public school education.

And just here I desire to express the wish that some day in the near future more pains will be taken to make schoolhouses beautiful in external appearance as well as commodious and healthful within. Thus far the architects who have designed the large majority of our smaller school buildings have clung tenaciously to the "schoolhouse type," and have given us, in the main, buildings devoid

of any attempt at niceties of proportion or unity of design. The advantages of the effects to be obtained by the proper use of building materials have been lost sight of and in many cases attempts at cheap ornamentation have been made at the expense of real beauty of form and hygienic considerations.

It seems strange, on first thought, that our schoolhouses have been among the last of public buildings through which public taste has sought to express itself. I wish here to enter a protest against this neglect, and at the same time to make a plea for the sake of the æsthetic education of the children, and through them for the development of an enlightened conscience and æsthetic sense in the public at large. I know of no class of public buildings deserving of more sincere thoughtfulness and artistic treatment than the school buildings which are designed to accommodate our children and in which they spend a great part of their waking hours during their early years.

The planning, designing, and building of schoolhouses is a highly specialized business, and cannot be safely left in the hands of men who know nothing about it. The sane and economical thing to do, even if only a one-story school building is to be erected, is to engage the services of a capable and conscientious architect, and with him work out every detail before the plan is finally accepted. Proportion in such buildings is almost everything, and to secure it, plans and elevations ought to be studied and carefully drawn, and specifications devised so explicitly that no mistake can be made. No amount of interior decoration will offset the bad effect of exterior ugliness. Real beauty is not expensive. The best things are in reach of us all. Log cabins can be built as satisfying to the artistic sense as palaces, indeed frequently more so. The planning of a one-story, one-room country schoolhouse ought to demand, and will demand from the scholarly, well trained, and efficient architect who is commissioned to design the building, as painstaking consideration as a large city school. In fact, it seems to me that the opportunity for the development and dissemination of taste in this, the central agency for social and æsthetic improvement in the country, ought to appeal with especial interest to all concerned.



BAY RIDGE HIGH SCHOOL, NEW YORK CITY

C. B. J. SNYDER, ARCHITECT



TERRA COTTA DETAIL

E. F. GUILBERT, ARCHITECT



FLUSHING HIGH SCHOOL, NEW YORK CITY

C. B. J. SNYDER, ARCHITECT

Architectural Terra Cotta

THE IDEAL BUILDING MATERIAL OF THE TWENTIETH CENTURY

ALTHOUGH there is no older manufactured material known to man, it is only in comparatively recent years that burned clay, in the perfected form of architectural terra cotta, has come into great prominence as a building material. The favor which it now finds among architects and builders is due in part to certain remarkable qualities which were long latent and undiscovered and which the demands of modern construction have brought to light; and in part to new qualities which have been added as a result of scientific investigation and experimentation with terra cotta in an effort to develop its full possibilities. Because of these unusual natural and acquired qualities and attributes, there is at present available to architects no material which merits more careful attention and consideration than architectural terra cotta. It is without doubt the ideal building material of the twentieth century.

Architectural terra cotta deserves the marked recognition which it is now receiving, first of all, because it is durable. The figurines of Tanagra and the water-jars of Egypt are in practically as good condition to-day as they were when made, thousands of years ago. Architectural terra cotta never wears out. There is, in fact, nothing about it that can wear out. It is as permanent as earth because it is earth. To the two forces that work most potently for the destruction of a building material, that is, fire and water, architectural terra cotta offers the most stubborn and successful resistance. It is manufactured under a terrific heat, more terrific than that of any conflagration. The appalling disasters at Baltimore and San Francisco proved that those buildings in which the structural materials are protected by architectural terra cotta and brick can most successfully withstand the ravages of fire. By water, the other of the two foes of permanence in a building material, architectural terra cotta is totally unaffected. In the case of many materials, water finds its way through the surface, freezes, causes expansion and ultimate disintegration. In the case of architectural terra cotta, this destructive process cannot even begin, because the first step, the penetration of water beneath the surface, is impossible, inasmuch as architectural terra cotta is impervious to moisture.

Architectural terra cotta is further excellently adapted to modern building construction because it is at once strong and light. Ordinarily, these two qualities are inconsistent: the material that is strong is heavy; and that which is light is weak and of uncertain resistance. The modern skyscraper demands a material so strong that it can be used with safety under the most exacting requirements, and so light that the cost of foundations, superstructure, and installation may be reduced to a minimum. Architectural terra cotta is just such a material, and its

use for the entire facing of the largest business buildings in the world is an evidence that wide recognition is being given to its unique qualities.

Every architect to-day is alive to the demands of beauty and attractiveness. Even in buildings designed for the most utilitarian purposes — in factories, for example — there is a strong demand that the æsthetic sense be satisfied. Architectural terra cotta, because of its infinite possibilities as regards form, may be modeled to express the most delicate beauty and charm. It can be made in many tints and colors and in limitless combinations of colors. And, what is equally important, it *retains* all of its original qualities. Dirt, smoke and soot do not permanently discolor its surface; they do no damage that cannot be easily undone by the application to the terra cotta of ordinary soap and water.

Architectural terra cotta, while it possesses these remarkable qualities, offers unusual opportunity for economy. This material makes it possible for the finest ornament to be used in buildings intended for the most practical purposes, at a most reasonable cost. For years, fine ornament was divorced from modern utilitarian architecture because it could be secured only by the slow process of individual hand carving. By fine ornament is not meant the disgusting amount of cheap, machine-made adornments that disfigure rather than embellish, but those legitimate forms that have had the endorsement of all ages. When the cost of hand carving became prohibitive, these had to be abandoned. Now, by the use of architectural terra cotta, — by making a plaster mold of one piece and pressing many pieces from the same mold, — the sculptor's model for cornice, pediment, or frieze can be duplicated at relatively low cost. This process of repetition is such a decided saving that it makes feasible the employment of the best available talent for the creation of the original model. As a result, the most pleasing effects can be introduced without waste and with the utmost economy.

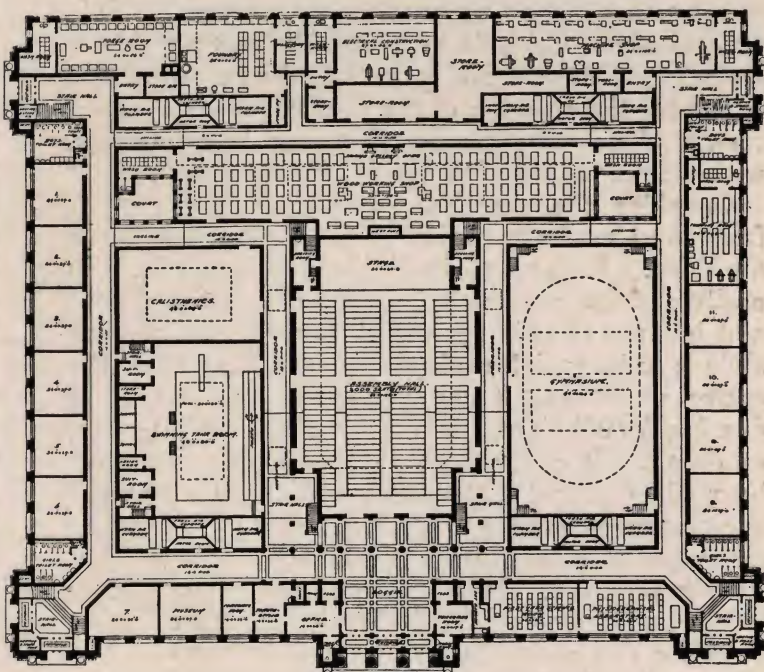
Consider the practical advantages that result from the use of a material with these extraordinary qualities. Because of its lightness of weight, it is easily and inexpensively handled and put in place; and because of this same lightness, it makes possible a substantial saving in connection with the entire structure. Once placed in position, it is durable for all time. It cannot melt, disintegrate, or decay. It can, moreover, in the first instance, be made unusually attractive and beautiful by the use of a great variety of surface finishes or of one or more colors, and this original beauty is permanently retained. It is fire-proof, water-proof, dirt-proof and time-proof. It is, in short, all that could be demanded by the most exacting and discriminating in the way of an ideal material for use in the buildings of the twentieth century.



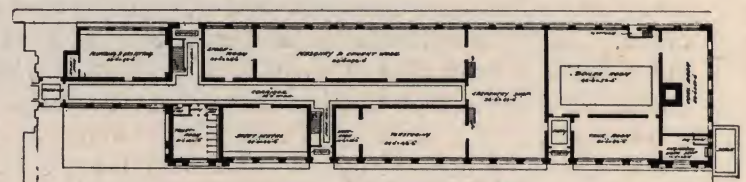
CONCENTRATED in the planning of this monumental schoolhouse are all the elements that formerly existed separately in a school, a public library, a clubhouse, and a factory. The problem of housing as many as 2,000 pupils, who receive instruction in a variety of subjects, ranging from the usual academic studies to such practical arts as machine design, woodworking, plumbing, commercial chemistry, etc., is indeed stupendous and calls for efficient planning to make the structure entirely serviceable. Under these circumstances the classic was wisely chosen. The result is an ambitious transformation of a style where solid wall area usually predominates into one where fenestration has the greater space, yet retaining such characteristic features as the order, pediments, and the central motif with its wealth of classic ornament, all admirably expressed in architectural terra cotta. This has all been done so well that it appears to refute those who claim that the classic cannot be successfully interpreted except by the use of stone.

Viewed from the standpoint of economy, such use of architectural terra cotta is wise, since a larger sum can be spent in the æsthetic development of each unit, which can then be repeated many times by moulding.

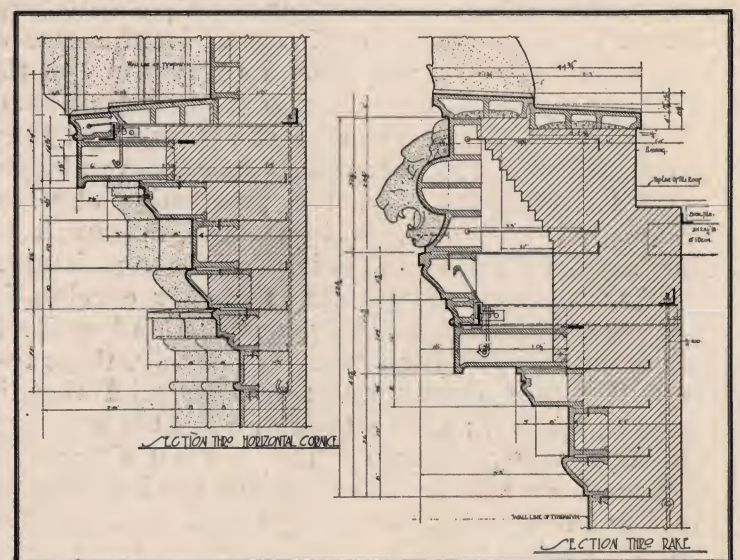
The plan of the Harrison School, consisting of a main structure and annex, is stupendous, embracing, as has been said, the requirements usually expressed separately in some half dozen buildings. The first floor contains an assembly room seating 2,000 people, boys' gymnasium and girls' gymnasium, and swimming tank, with separate dressing rooms for boys and girls; also the manual training department, with laboratories, machine, woodworking, and pattern shop, with foundry and forge rooms.



First Floor Plan



First Floor Plan — Shop Annex



Sections

CARTER H. HARRISON TECHNICAL HIGH SCHOOL, CHICAGO, ILL.
A. F. HUSSANDER, ARCHITECT

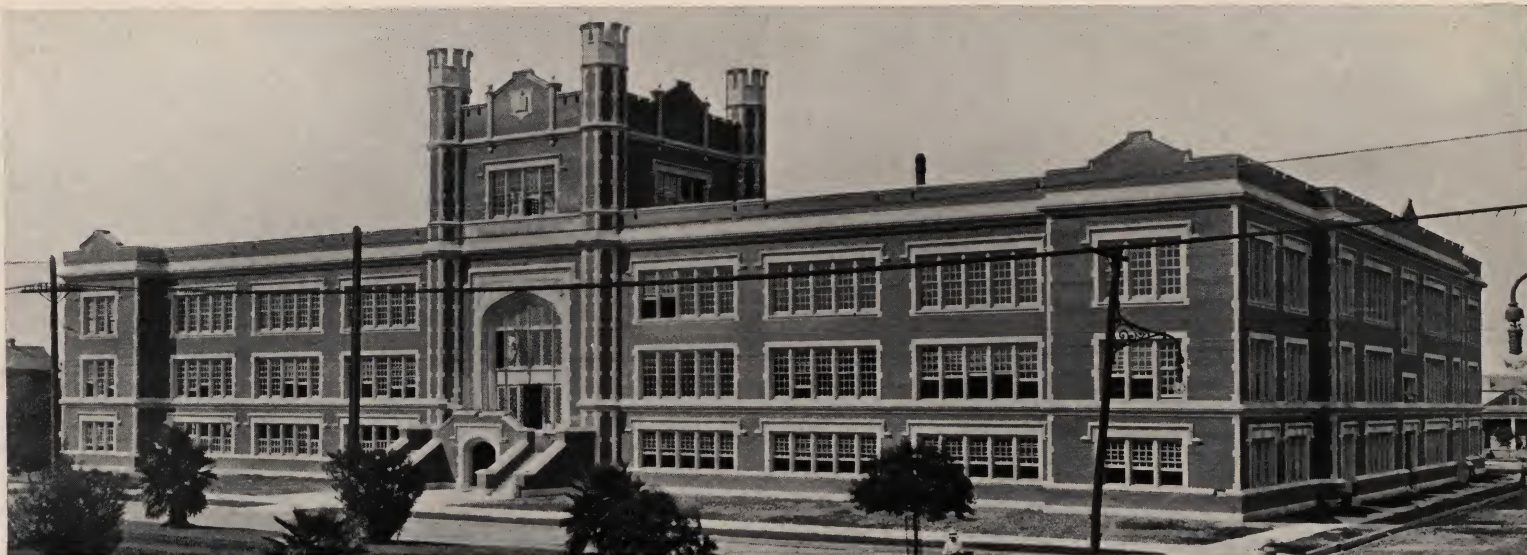


Detail of Central Pavilion — Main Entrance



Details of Architectural Terra Cotta Ornament

CARTER H. HARRISON TECHNICAL HIGH SCHOOL, CHICAGO, ILL.
A. F. HUSSANDER, ARCHITECT



Warren Easton Boys' High School, New Orleans, La., S. A. Christy, City Architect



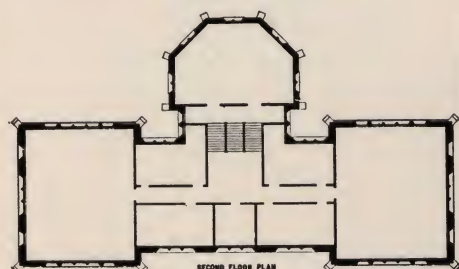
Entrance Detail, Boys' High School

WARREN EASTON BOYS' HIGH SCHOOL
New Orleans, La.

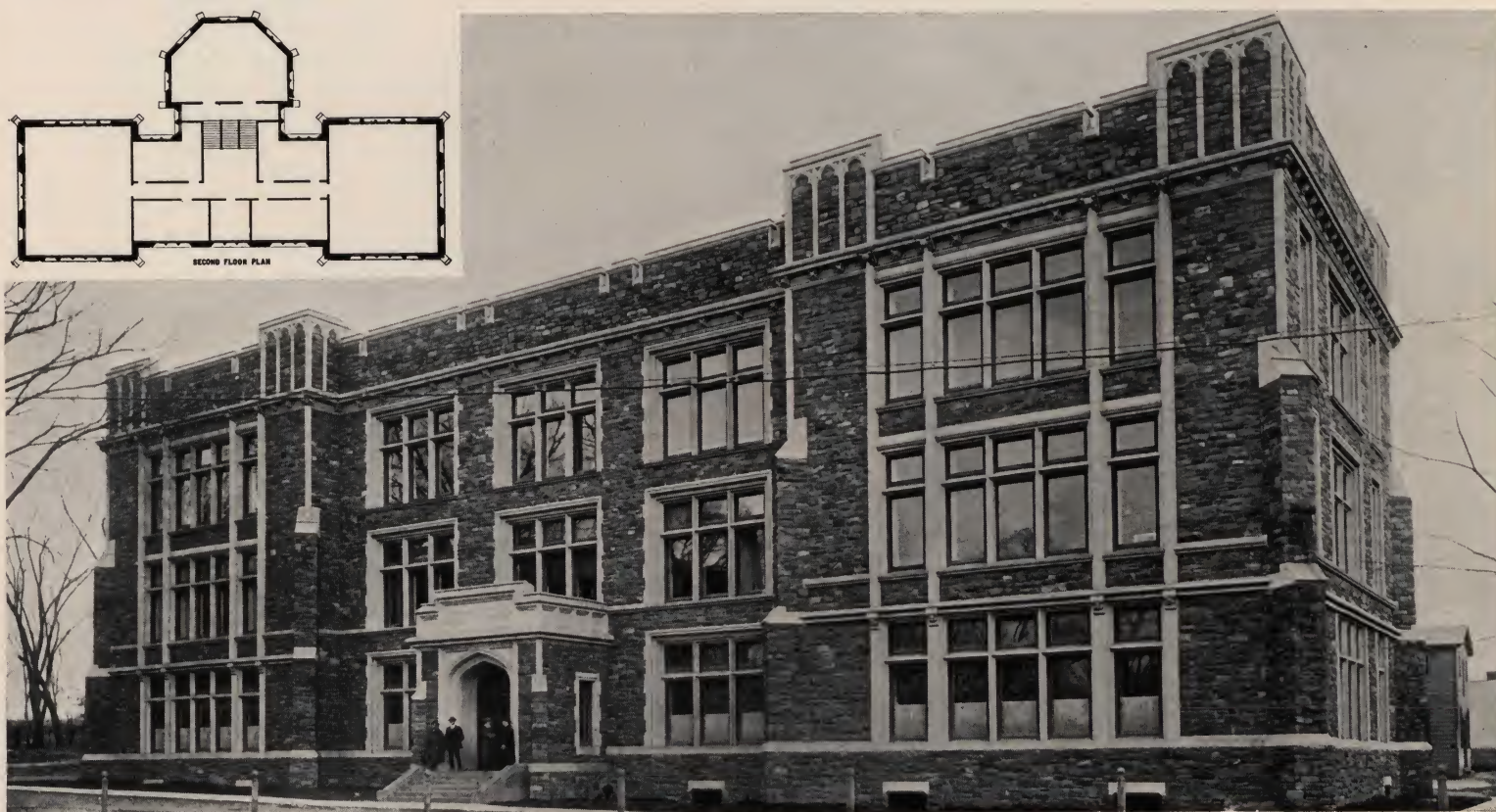
AN example where maximum fenestration is skilfully disposed across the façade of the building. Much interest is given to this expanse of windows by small panes of glass whose muntins are painted light gray to match the terra cotta trim. The distinguishing feature of the composition is the central tower, whose proportions are cleverly emphasized by carrying the terra cotta quoins uninterruptedly from ground to roof. The great Gothic arch which emphasizes the main entrance exhibits the possibilities of architectural terra cotta for carrying out elaborately moulded sections. The cornice bands and string courses in light gray terra cotta complete the effect.



Entrance Detail, Fordham University



SECOND FLOOR PLAN



Fordham University School of Medicine, New York City, Reiley & Steinback, Architects



"Writing"



"Boy"



Detail of Central Pavilion



"Geography"



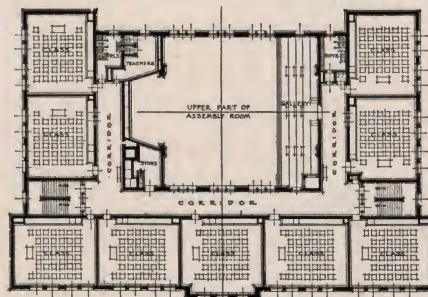
"Girl"

THIS school building is a modern adaptation of Flemish or Dutch Renaissance. The central pavilion, with its stepped gable forming a fanciful silhouette and its variety of terra cotta forms, follows closely the lines of the quaint Dutch houses so common in Holland, and is a strikingly good bit of architectural terra cotta designing. The lower portion of this pavilion has been treated as an open loggia which greatly dignifies the main entrance. Architectural terra cotta is used for all trim and for ornamental features above the columns. The four gro-

tesques shown in detail are symbolic of Reading, Writing, Arithmetic, and Geography. The "boy" and "girl" medallions in the gable are in polychrome terra cotta. The border of these medallions is white enamel; the background, medium dark blue; the drapery, light blue; the face, flesh color; and the hair, brown. In place of the usual window, an ornamental panel has been placed in the center of the main gable. All of the architectural terra cotta is excellently modeled, particularly the great band of strapwork so characteristic of the period.



"Reading"



Second Floor Plan

RIDGE SCHOOL, NEWARK, N. J.
E. F. GUILBERT, ARCHITECT



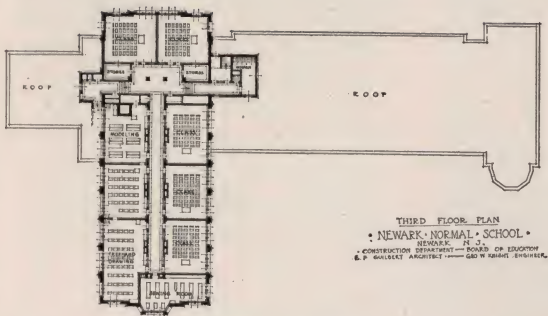
"Arithmetic"



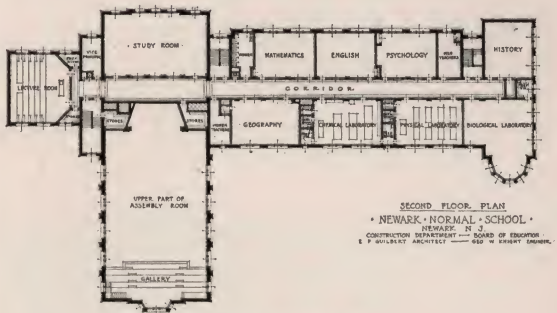
General View



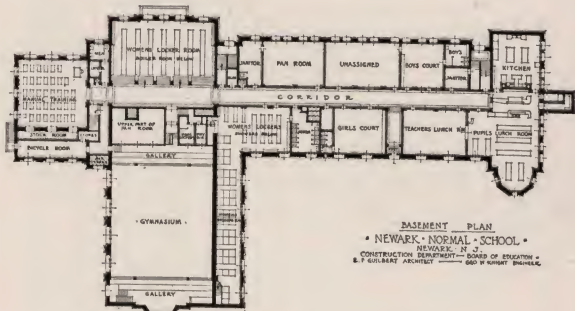
Tower, South Side High School
(See note on page 11)



Third Floor Plan



Second Floor Plan



Basement Floor Plan



Assembly Hall Wing

THE NORMAL SCHOOL, NEWARK, N. J.
E. F. GUILBERT, ARCHITECT



Entrance Detail



Southwest Bay

THE English Jacobean is often chosen as the style for our modern schoolhouses, because both sentimental and practical reasons are in its favor. Not only is it reminiscent of many of the older educational institutions of learning, as Oxford and Christ Colleges, but it permits, without any violation of prototype, of that effective and expansive fenestration necessary for the proper lighting of large class rooms.

The plan of the new Normal School at Newark, N. J., was chosen after a careful study of the site. The main school-rooms are all back towards the quietest of the surrounding streets; while the sunken garden, which the contour of the land permitted, was so placed as to intervene between noisy thoroughfares and recitation rooms. Not only has this intelligent study resulted in a very unusual and diversified composition, but also in a very practical school building.

The building is a successful and pleasing combination of architectural terra cotta and brick. The terra cotta is light gray throughout, finished in a dull matt glaze; the brick-work varies from light red to blue black, and is laid in white mortar with wide flush joints.

Adequate lighting of class rooms has been quite successfully accomplished by grouping the windows in bays and



Architectural Terra Cotta Panel — Entrance Detail

reducing the supporting piers to a minimum. These piers have been projected like buttresses, the cornice and string courses breaking around them and each terminated in a terra cotta finial above the roof balustrade.

The architectural terra cotta is used freely throughout the building for trim, but its use in decoration has been confined to a few distinctive features which

stand out in bold contrast to the brick field. The fine decorative effect of these features — principally the entrance and bay of the assembly hall wing, the entrance from the terrace above the garden, and the bay on the southwest — is due to the general excellence of the modeling and the suitability of the design for execution in architectural terra cotta.

South Side High School, Newark, N. J.

E. F. Guilbert, Architect

THE practical and very ornamental use of architectural terra cotta for the decorative detail of a tower is shown in the illustration in the upper right hand corner of page 10. The termination of this tower with its pierced balustrade and open belfry has the grace and delicacy of a light metal structure with the further advantage of solidity, which architectural terra cotta insures any structure in which it is used.

THE NORMAL SCHOOL, NEWARK, N. J.

E. F. GUILBERT, ARCHITECT



General View



Entrance Detail

DENMAN SCHOOL, SAN FRANCISCO, CAL.
A. S. COOLEY, CITY ARCHITECT

THE following is quoted from a recent description by a well known architectural writer :

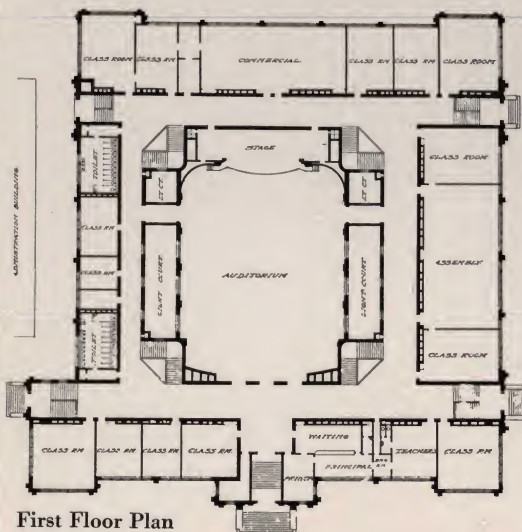
"It seems hardly extravagant to characterize the Denman Schoolhouse as one of the finest in the country. Besides being an ideal expression of its plan and material, it is a choice adaptation from a style that prevailed centuries ago, to a requirement that has asserted itself only within the last few years. Nor is it in the least sense a servile adaptation, for the end treatment and much of the detail is refreshingly new.

"By means of well studied brickwork and charmingly executed terra cotta, great interest and dignity have been imparted to the blank walls. Indeed, throughout, all architectural terra cotta embellishment is in excellent taste and true to the spirit of the material. The wealth of refined moulding found in the cornice recalls how the North Italian architects gave infinite variety to the shadows on their beautiful terra cotta cornices. An excellent idea of the delicacy of all the ornamentation is conveyed by a study of the doorway. The modeling is a pleasing improvement over the harsh, crisp style frequently employed.

"The interior arrangement can be immediately grasped without the aid of a plan. The doorways, with windows above, at once signify the bisecting corridors that divide each floor into four units of two class rooms each."



General View



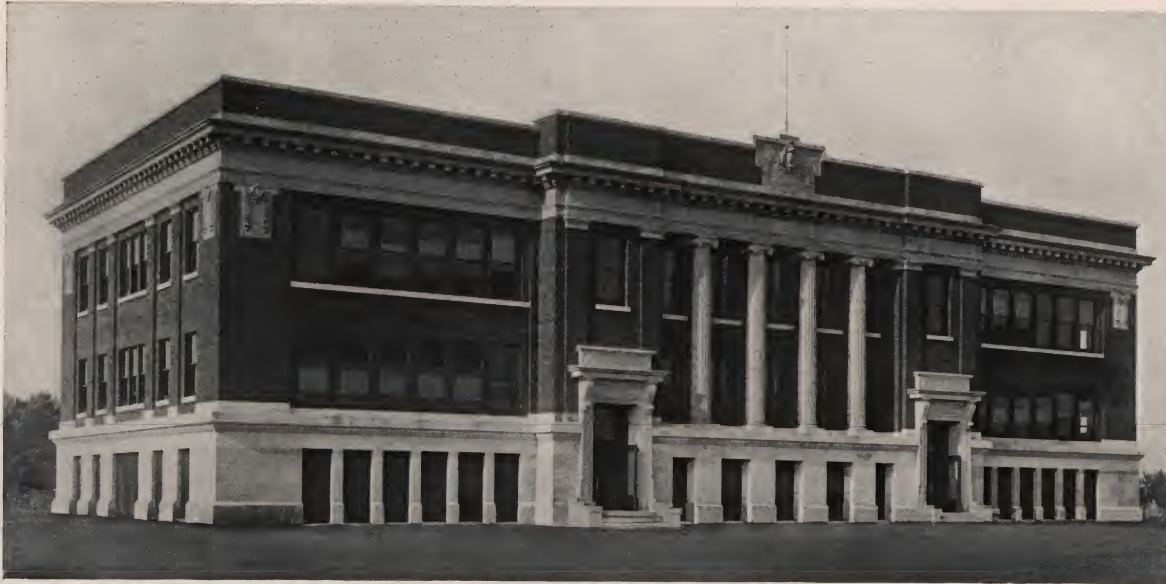
First Floor Plan


Architectural Terra Cotta
Detail
Grotesque in Tower


Entrance Detail

IN this example a minimum area is allowed for wall space and a maximum area for windows; adequate lighting — that prime requisite for all schoolhouses — is the result. To impart a feeling of greater strength, the piers between groups of windows have been extended to form buttresses, which contribute to the exterior a pleasing play of light and shade. The central feature is full of interest, not only in point of general design, but in the attractive combination of brick and architectural terra cotta, the latter predominating toward the top. The terra cotta buttress caps and crenelations create a silhouette, the effectiveness of which is enhanced by medieval gargoyles. It would be hard to find an instance where the material employed has more happily caught the spirit of the designer.

LEWIS AND CLARK HIGH SCHOOL, SPOKANE, WASH.
L. L. RAND, ARCHITECT



P. R. Walker High School, Rockford, Ill., Spencer & Temple, Architects

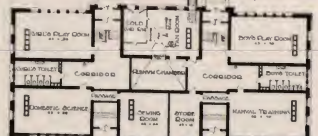
THIS building is of marked substantiality. It contains no unnecessary ornament and represents a phase of classic architecture. This school has been quoted as one of the most satisfactory in the state of Illinois in point of economy and convenient arrangement. Special pains have been taken to provide good lighting, ample corridor space, and numerous stairs and exits. The materials throughout are fireproof, and the heating plant, as a further safeguard, is located in an isolated building. On the ground plan are found domestic science rooms, manual training rooms, and play rooms for boys and girls. The first floor has six class rooms and the second five class rooms with offices and teachers' rooms. All corridor floors, toilet room floors, stair steps and risers, and all wainscoting in corridor and toilet rooms are in marble terrazzo. The fluted columns, cornice, and all ornamental features above the first story are of architectural terra cotta.



Second Floor Plan



First Floor Plan



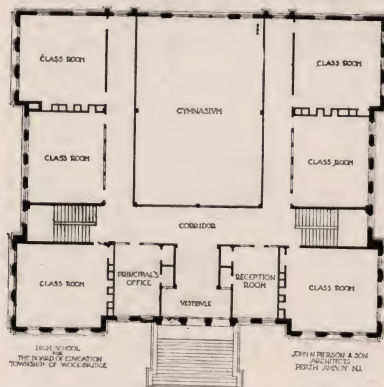
Basement Plan



Terra Cotta Cartouche



Terra Cotta Pilaster Capitals
Woodbridge High School



Woodbridge High School, Woodbridge, N. J., J. N. Pierson & Sons, Architects

A STRAIGHTFORWARD scheme in plan and elevation. Exterior walls are trimmed with architectural terra cotta and faced with pressed brick. The capital in the illustration indicates the character of the terra cotta work. This detail closely follows classic tradition and is well modeled.

Interior walls are of hollow tile throughout. Plastering is applied directly to the tile in all cases. Floors are combination tile and concrete. Exterior walls are self supporting and carry heavy terra cotta cornice in addition to the floor and roof loads.

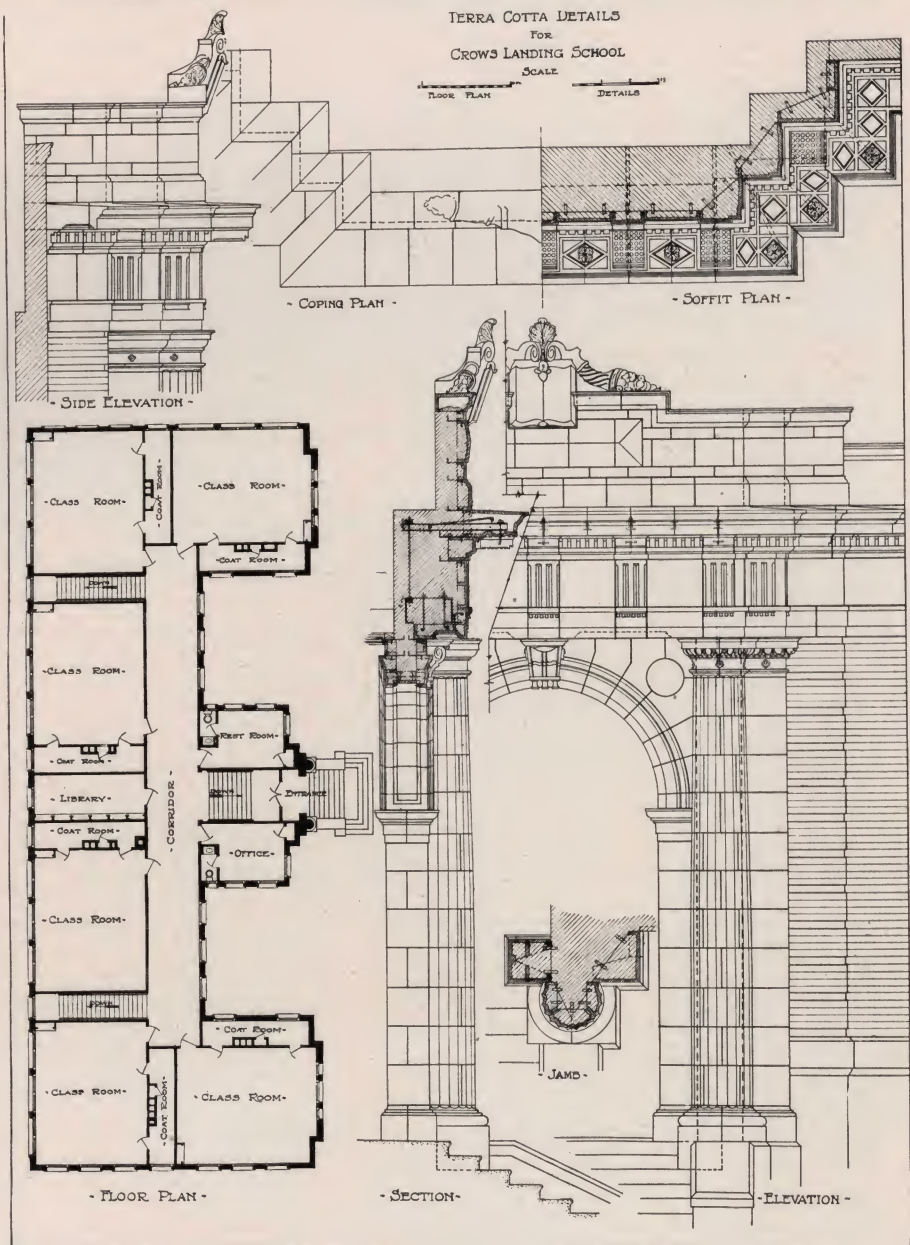


Front Elevation

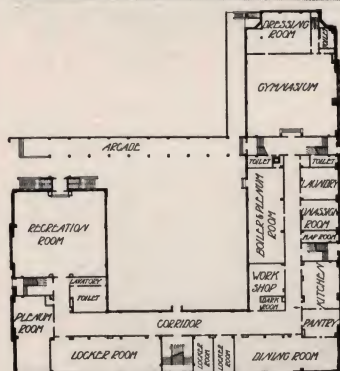


Entrance Detail

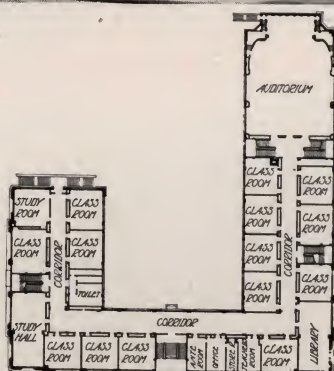
A TYPE of one story schoolhouse commonly found in the far West. The walls are of red pressed brick and most of the light colored trim shown in the illustration is matt enameled architectural terra cotta, having a slight cream tint. The round disks in spandrel over arch are green marble, — verde antique. The small windows in the wing are glazed with richly colored opalescent glass, which lends a touch of color that gives a very pleasing effect. Architectural terra cotta — polychrome — is often employed in façade decoration to obtain similar results.



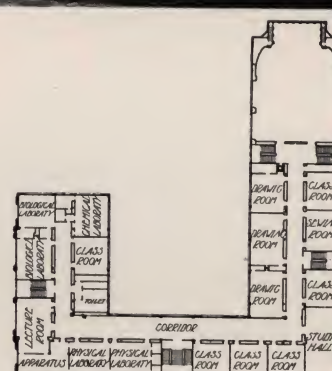
GRAMMAR SCHOOL, CROW'S LANDING, CAL.
W. H. WEEKS, ARCHITECT



Basement Floor Plan



First Floor Plan



Second Floor Plan



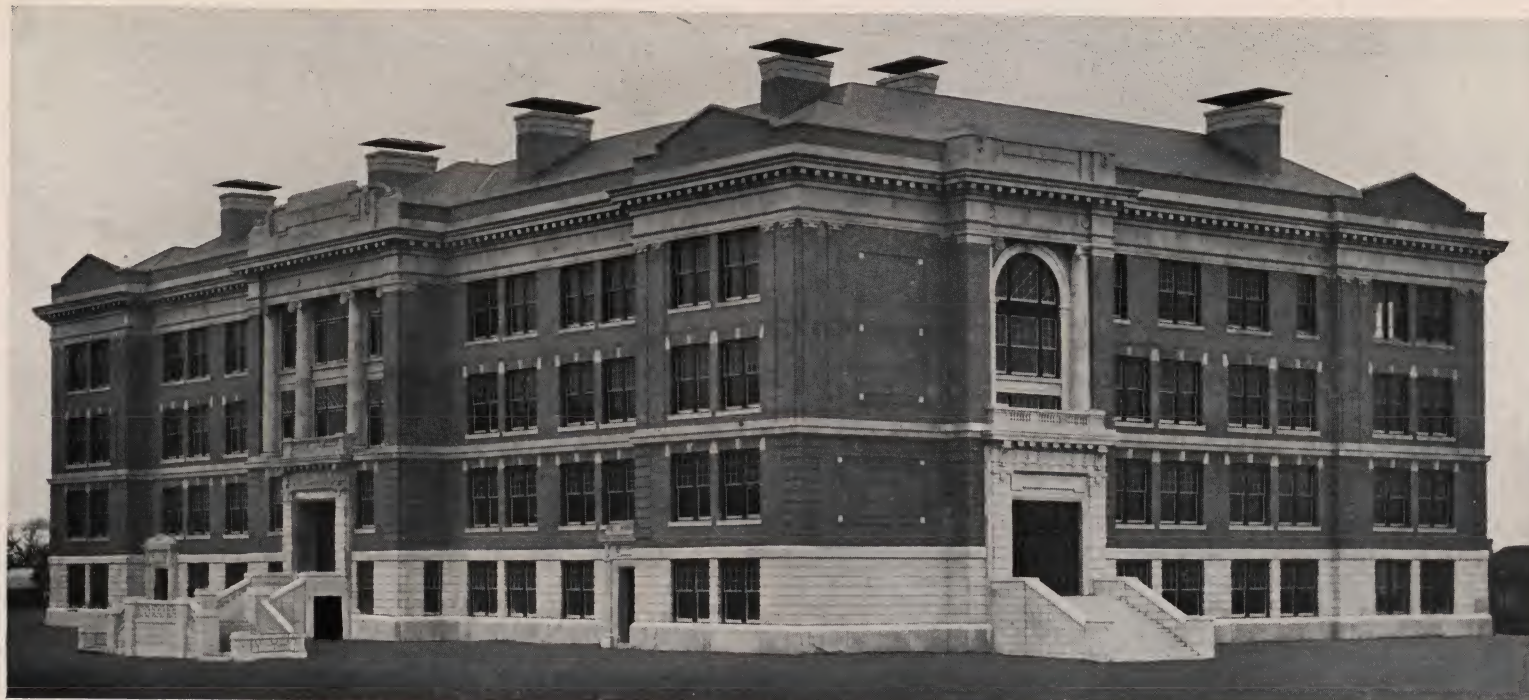
Entrance Detail

THE design of the Girls' High School at San Francisco appears to be admirably adapted to the materials in which it is executed. These materials are semi-glazed architectural terra cotta and buff-colored brick. The ornament and various motifs executed in terra cotta are reminiscent of a style long associated with that material; while the pilaster flutings, executed in brick, are a distinct and somewhat pleasing departure from precedent. The true lines of the architectural terra cotta indicate the use of skill and care in its manufacture; the mouldings are good; the modeling crisp. In the sculptured pediment of the main facade the modeler found an opportunity and made the most of it. In addition to the caps and bases of the order, architectural terra cotta is successfully used for entrances, all belt courses, the architrave and cornices of the main order, and for the pediment and crowning balustrade.

The plan of the building provides for ample light and air and conveniently co-relates the parts. There are five well placed stairs and eight entrances. Twelve class rooms are found on the first floor and ten on the second, besides science laboratories, lecture rooms, and large library. The basement is partly occupied by a gymnasium — unusually large for a girls' public school.

San Francisco, guided by the awful experience of her great catastrophe, now builds her walls of architectural terra cotta and brick — both burned clay products, made by fire — to fire immune.

THE GIRLS' HIGH SCHOOL, SAN FRANCISCO, CAL.
DESIGNED BY THE CITY ARCHITECT



General View

THIS building is planned in the shape of the letter "E" and is of impressive dimensions, covering a site 236 by 135 feet. The heavy base course at ground level is of granite. The architectural terra cotta starts immediately on top of this base with rusticated ashlar facing for lower walls and then appears throughout the building in all the light colored trim up to and including the chimney coping.

Brick pilasters, introduced at corners of building, have been relieved with architectural terra cotta capitals and bases, and the brick panels in blank walls are made interesting by white inserts of architectural terra cotta.

All the latest theories of modern equipment seem to have been considered in planning this Canadian school-house. Equipment includes ideal class rooms and class-room furniture; library; reception room; auditorium and assembly hall with stage and stage settings; sunny laboratories with workroom apparatus, including motor-generatory set in physical laboratory; gymnasium with complete equipment; bicycle storeroom; commercial and typewriting rooms; individual steel lockers for each pupil; sanitary drinking fountains; conveniences for supplying pupils and teachers with hot and cold lunches; shower baths; automatic temperature regulators; panic proof exit, locks, and bolts; complete vacuum cleaner plant; stereopticon provision and equipment in lecture rooms.

But what may be named as a distinct innovation is an armory and a miniature rifle range for the Cadet Corps — an accompaniment to the popular Boy Scout movement.



Entrance Detail

VICTORIA HIGH SCHOOL, VICTORIA, B. C.
C. ELWOOD WATKINS, ARCHITECT



Front Elevation



Detail of End Bays



Detail of Tower Bay



Details of Figures in String Course

AN imposing school, built of brick and architectural terra cotta in the style of English Collegiate Gothic. Terra cotta is used throughout for mullions and window trim ; also for string courses, quoins, tower embellishment, and ornamental features over the bays. In the disposition of windows, the Englewood School departs from the ordinary practice in that the unit is a triple window which, except in the great bays, is spaced evenly over the façade. The liberal use of grotesque figures in the main string course and in the crowning course of the tower adds much to the life and spirit of the design.

ENGLEWOOD HIGH SCHOOL, CHICAGO, ILL.
D. H. PERKINS, ARCHITECT



William F. Harrity School, Philadelphia, Pa.
J. Horace Cook, Architect



South Side High School, Newark, N. J.
E. F. Guilbert, Architect



St. Rose's School, Chelsea, Mass.
Mathew Sullivan, Architect

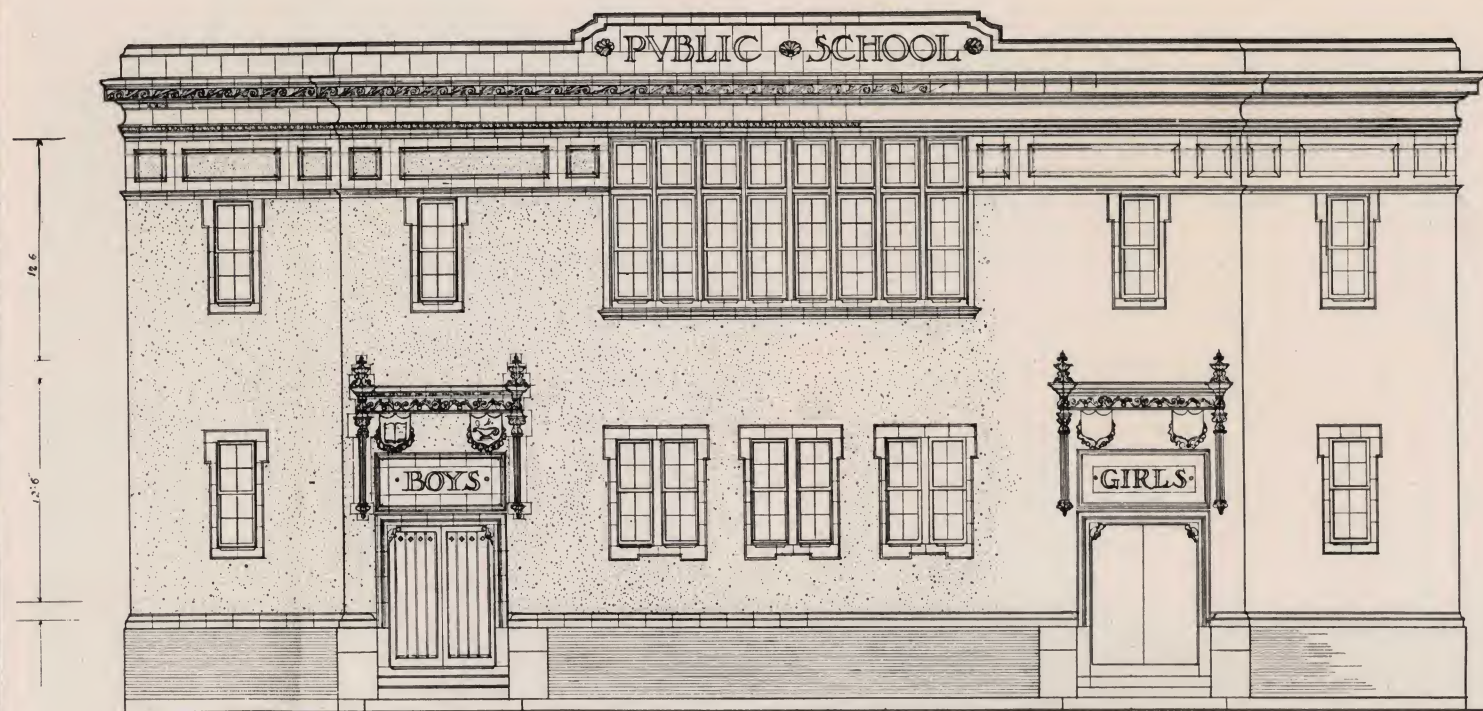


Englewood High School, Chicago, Ill.
D. H. Perkins, Architect

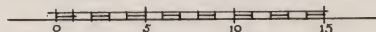


Commercial and Manual Training High School, Newark, N. J.
E. F. Guilbert, Architect

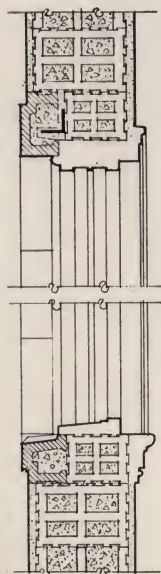
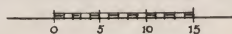
SCHOOL ENTRANCES EXECUTED IN ARCHITECTURAL TERRA COTTA



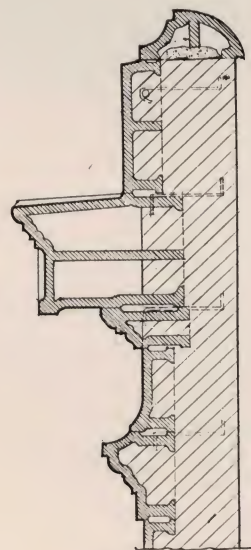
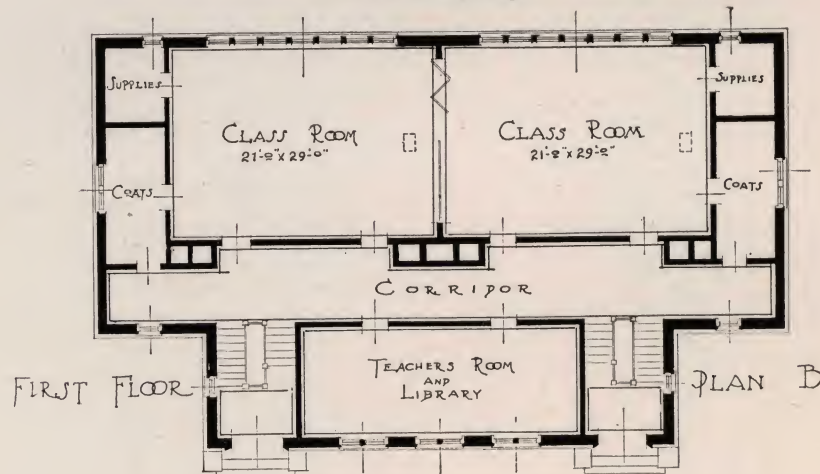
• SCALE OF ELEVATION •



• SCALE OF PLAN •



SCALE 1/2"=1'-0"
SECTION THROUGH WINDOW OPENING.
FIRST FLOOR.

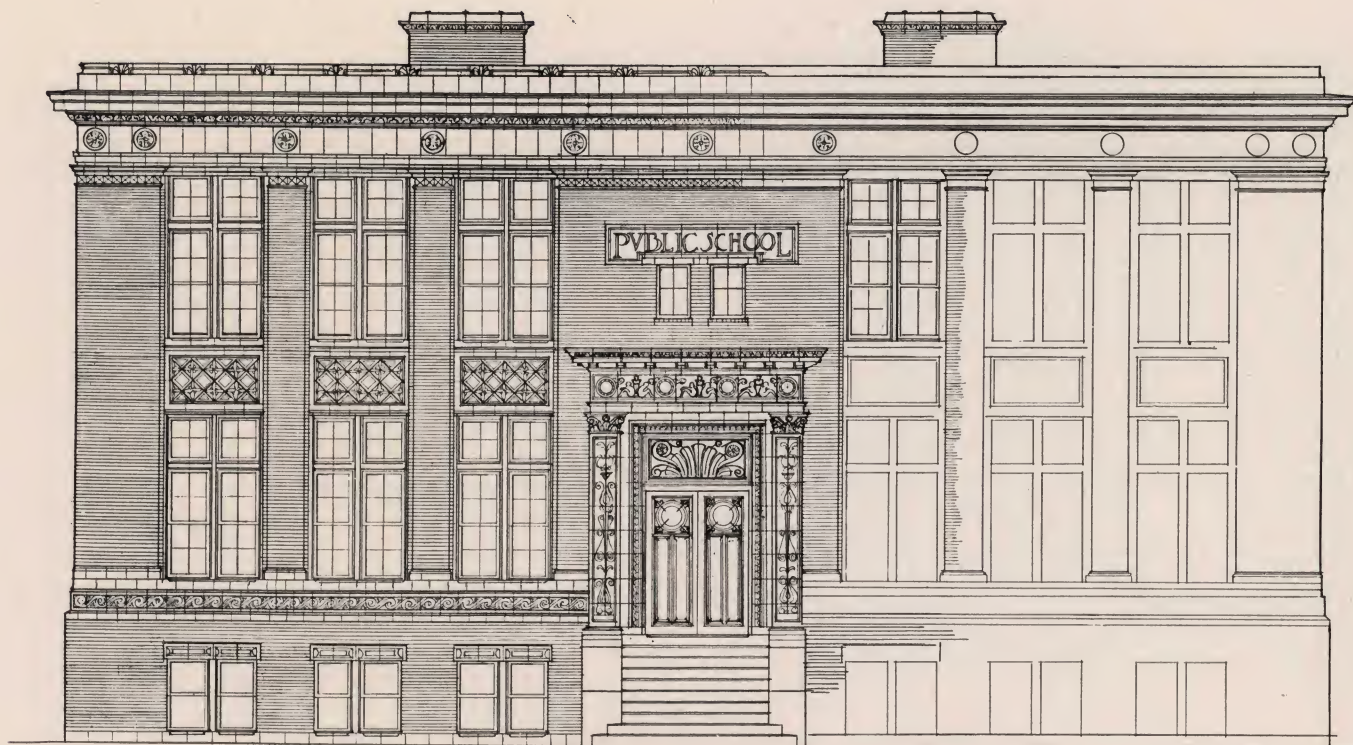


SCALE 1/2"=1'-0"
SECTION THROUGH CORNICE

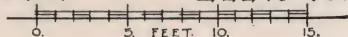
THIS wall treatment, following Spanish precedent, is stucco plastered directly on structural terra cotta blocks with inserts of architectural terra cotta. This is a variant from brick walls and, in localities where there are not great extremes of temperature, it is a satisfactory and pleasing form of construction. The window encasements, cornice, and parapet are entirely of architectural terra cotta, while the frieze is terra cotta interspersed with stucco

panels. The cornice and doorway are not the stone designs that are often handed over to a plastic material for the sake of economy, but both in sentiment and construction are designed expressly for execution in architectural terra cotta. The warm gray tone of a well-built stucco wall offers an excellent opportunity to introduce pleasing contrasts by the use of colored architectural terra cotta — either monochromatic or polychromatic, as the designer may prefer.

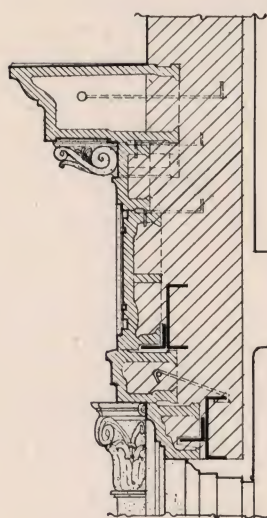
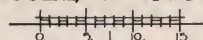
ARCHITECTURAL TERRA COTTA SUGGESTION NUMBER ONE



SCALE • OF • ELEVATION •

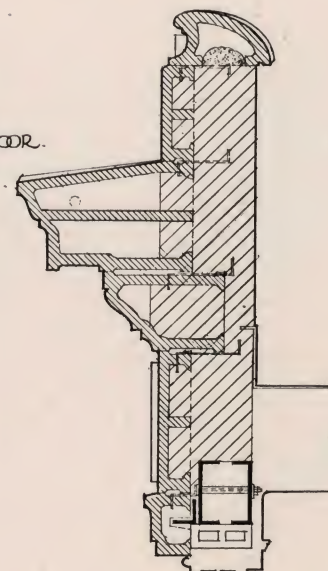
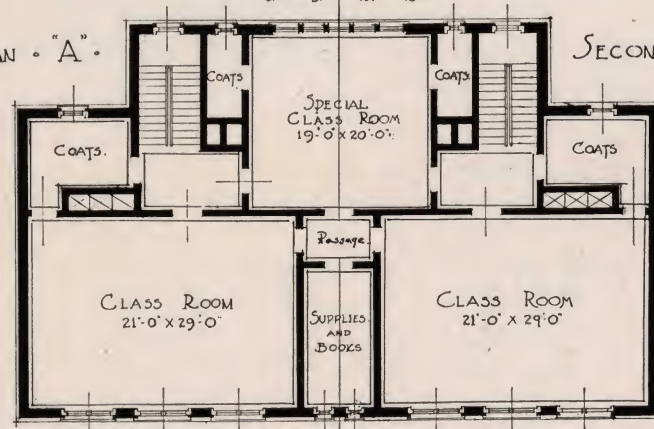


SCALE • OF • PLAN •



SCALE 1/2"=1'-0"
SECTION THROUGH ENTRANCE

PLAN • "A" •

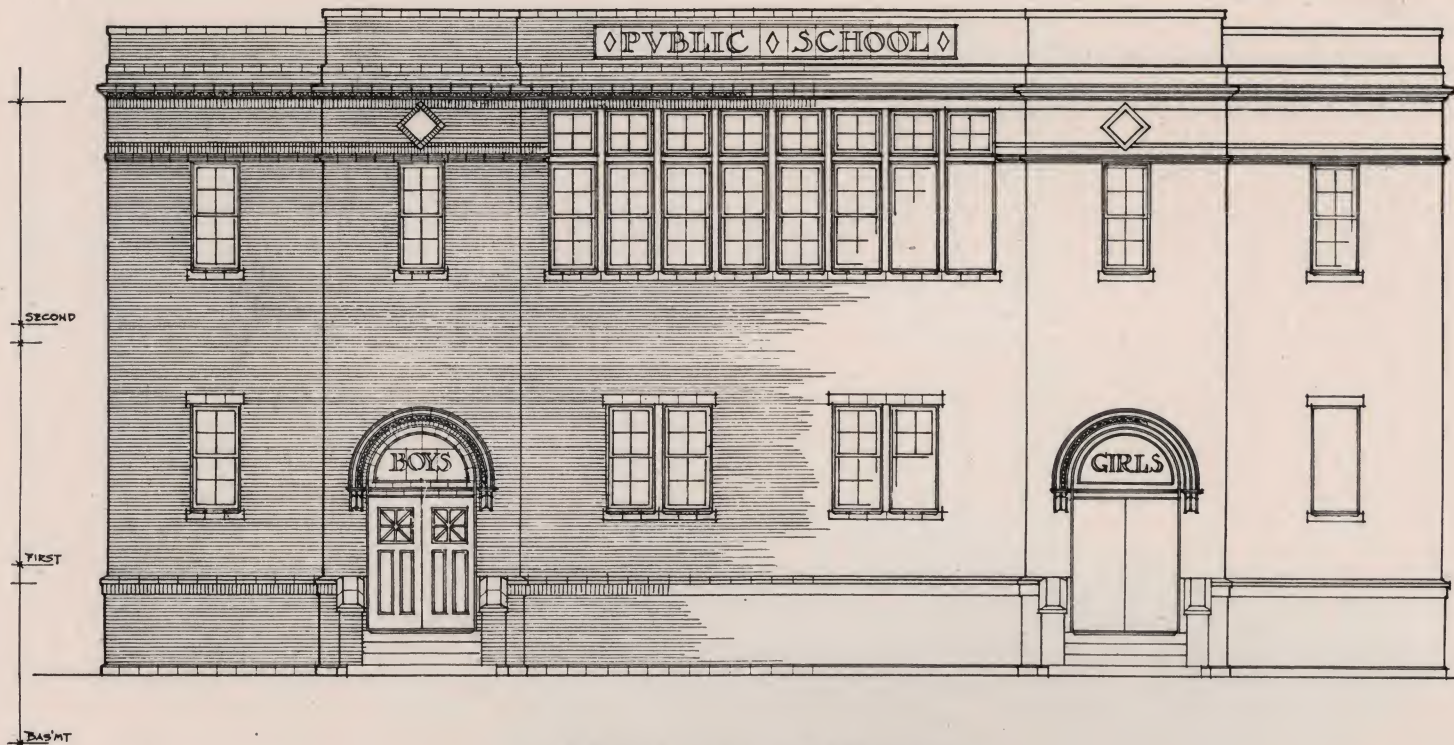


SCALE 1/2"=1'-0"
SECTION THROUGH CORNICE

A DESIGN following the more conventional lines of the Italian Renaissance, where the only feature emphasized is the doorway. A well known New York architect recently wrote as follows: "In designing for economy, it is just the idea of building as simply as possible, and concentrating all the adornment on a single feature, that makes the most of the

investment, because excellence of the entire design is often judged by the one elaborate motif." The idea expressed in this quotation is the keynote of the design suggested above; for although the band courses and frieze carry ornamentation, it is simpler than that of the doorway and consequently entirely subservient to it.

ARCHITECTURAL TERRA COTTA SUGGESTION NUMBER TWO

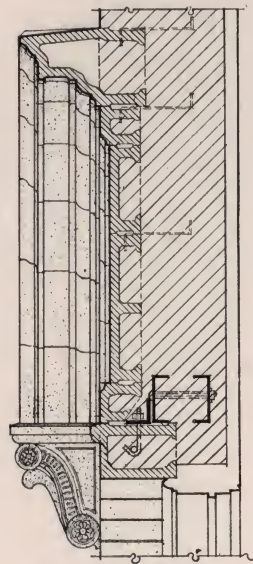


• SCALE • OF • ELEVATION •

0 5 10 15 FEET.

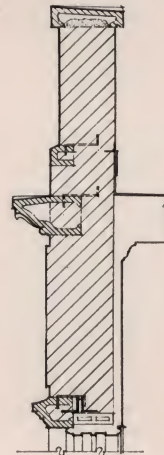
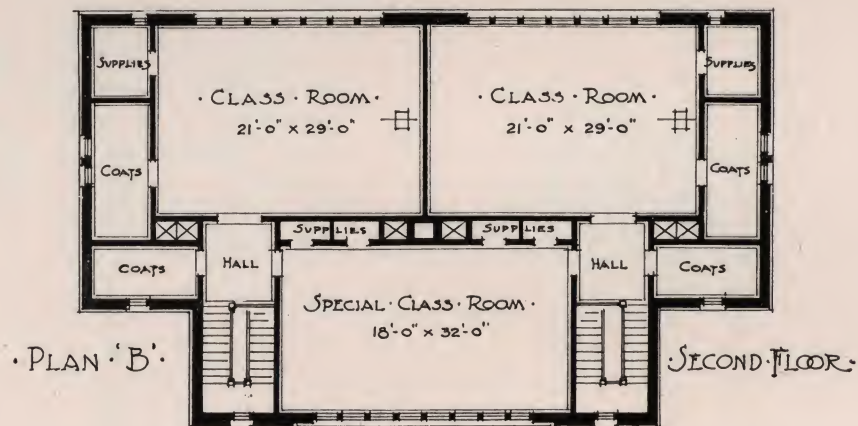
• SCALE • OF • PLAN •

0 5 10 15 FEET.



SCALE 1/4"=1'-0"

SECTION THROUGH ENTRANCE.

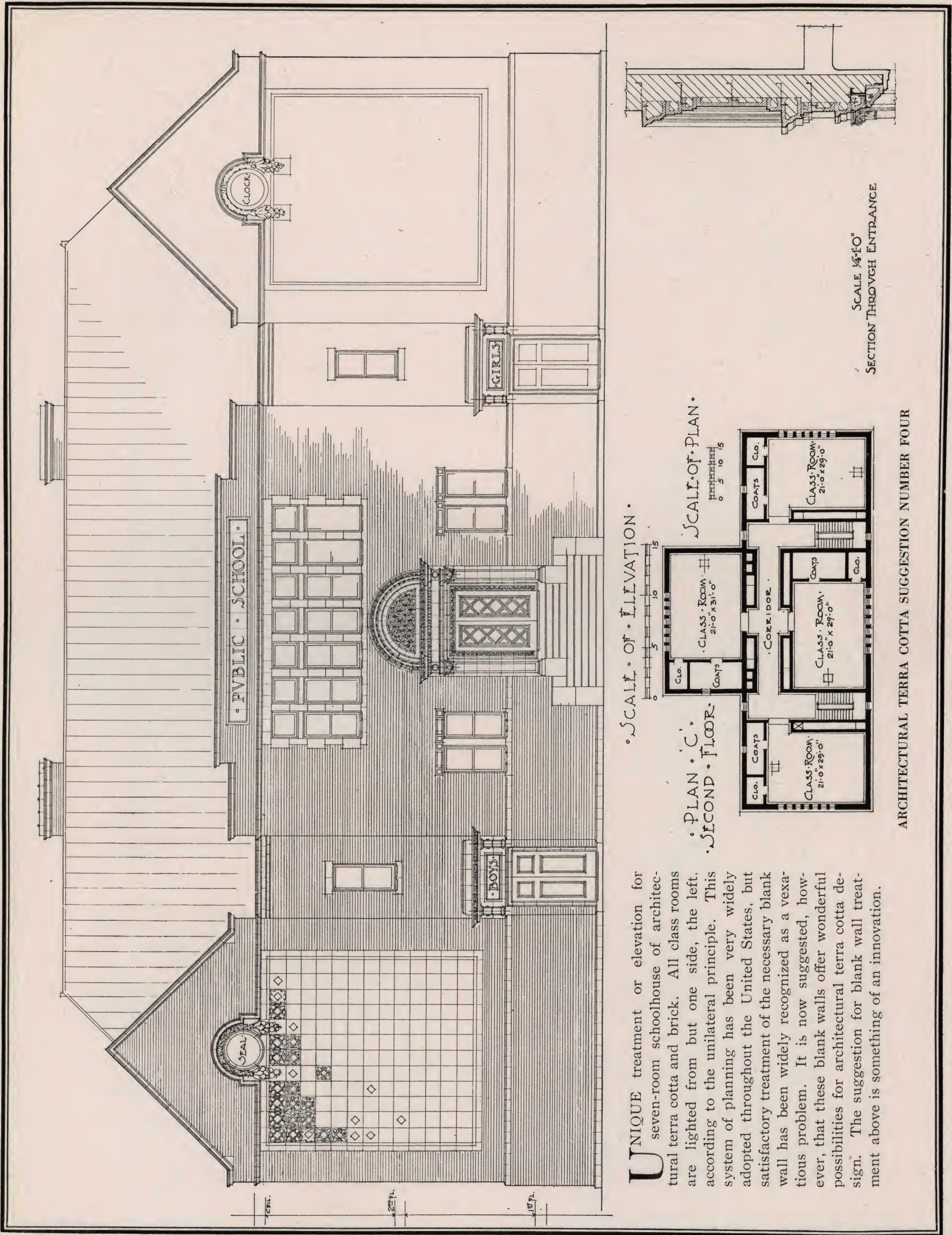


SCALE 1/4"=1'-0"
SECTION AT ROOF

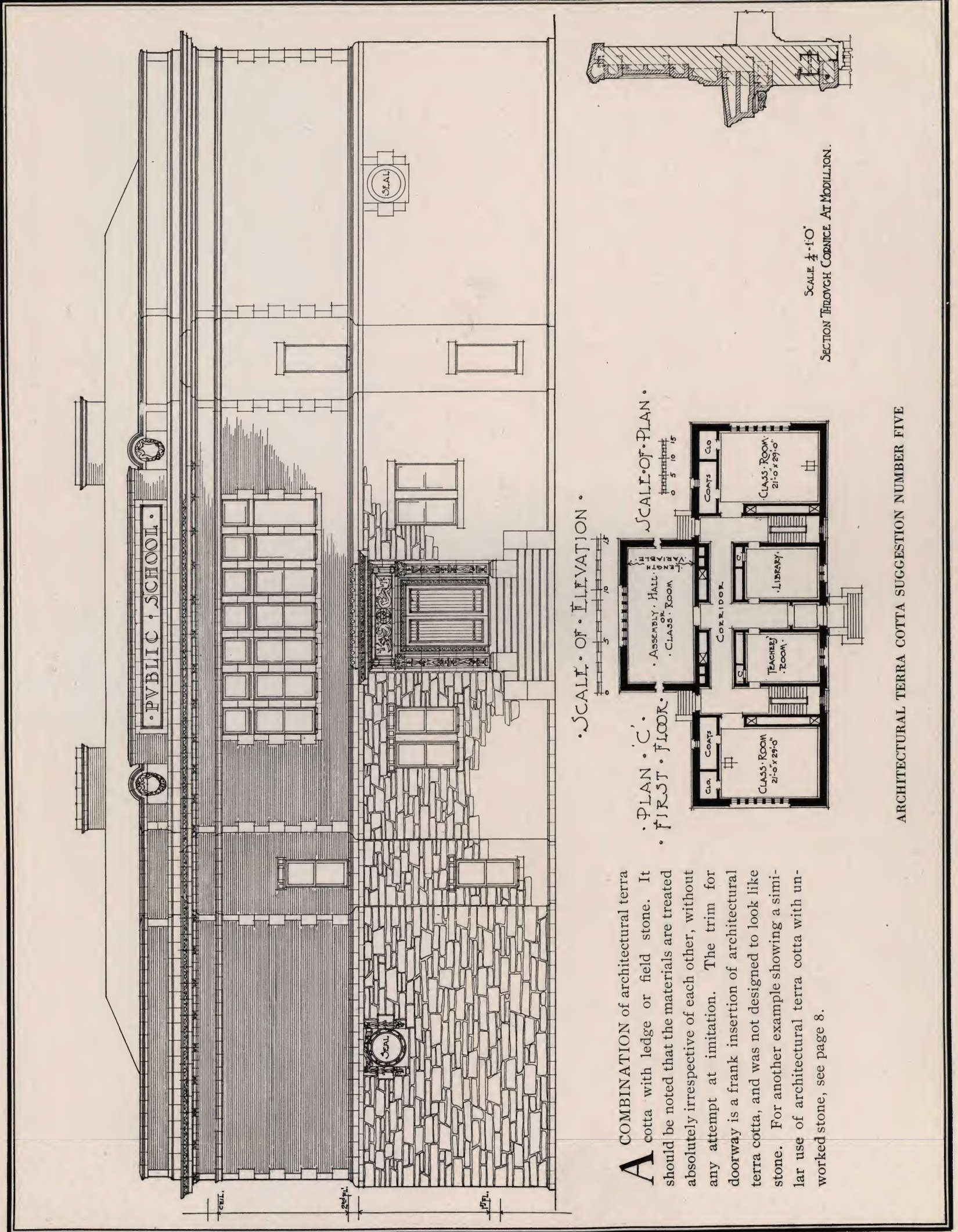
A SIMPLE six-room school with a well proportioned elevation of architectural terra cotta and brick. The ornamentation is reduced to a minimum, still the brick patterning in the frieze and the simple terra cotta cornice, with leaf mould to give interest to the shadows, together with arches over the doorways, tend to relieve all severity. The

design suggests that economical construction does not necessarily mean the use of cheap materials, all of which prove most expensive in the long run. By the use of architectural terra cotta, well designed, permanency and beauty may be obtained without sacrifice of true economy, even in this class of smaller school building.

ARCHITECTURAL TERRA COTTA SUGGESTION NUMBER THREE



UNIQUE treatment or elevation for seven-room schoolhouse of architectural terra cotta and brick. All class rooms are lighted from but one side, the left, according to the unilateral principle. This system of planning has been very widely adopted throughout the United States, but satisfactory treatment of the necessary blank wall has been widely recognized as a vexatious problem. It is now suggested, however, that these blank walls offer wonderful possibilities for architectural terra cotta design. The suggestion for blank wall treatment above is something of an innovation.



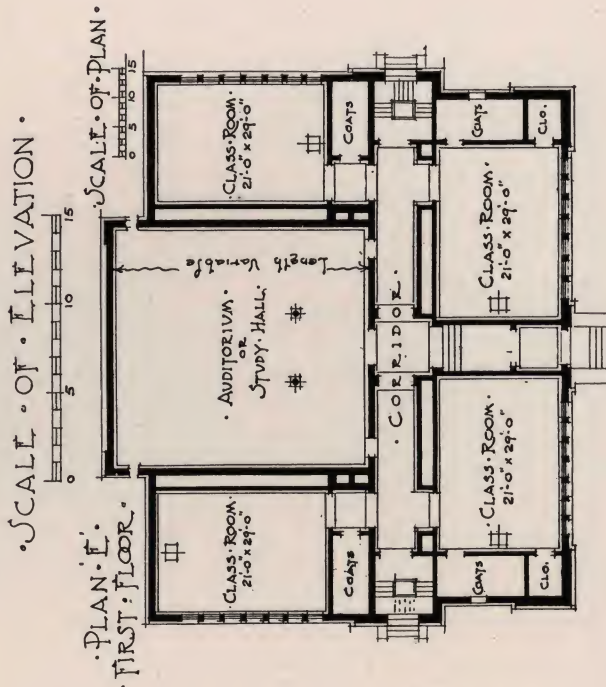
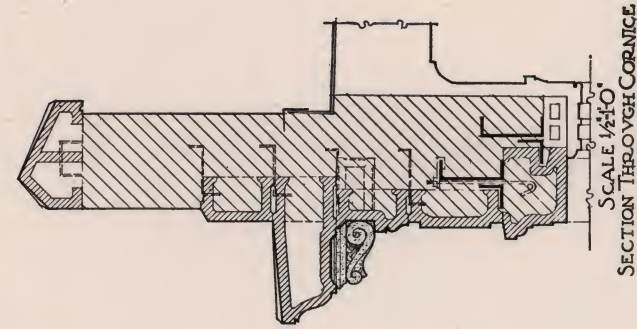
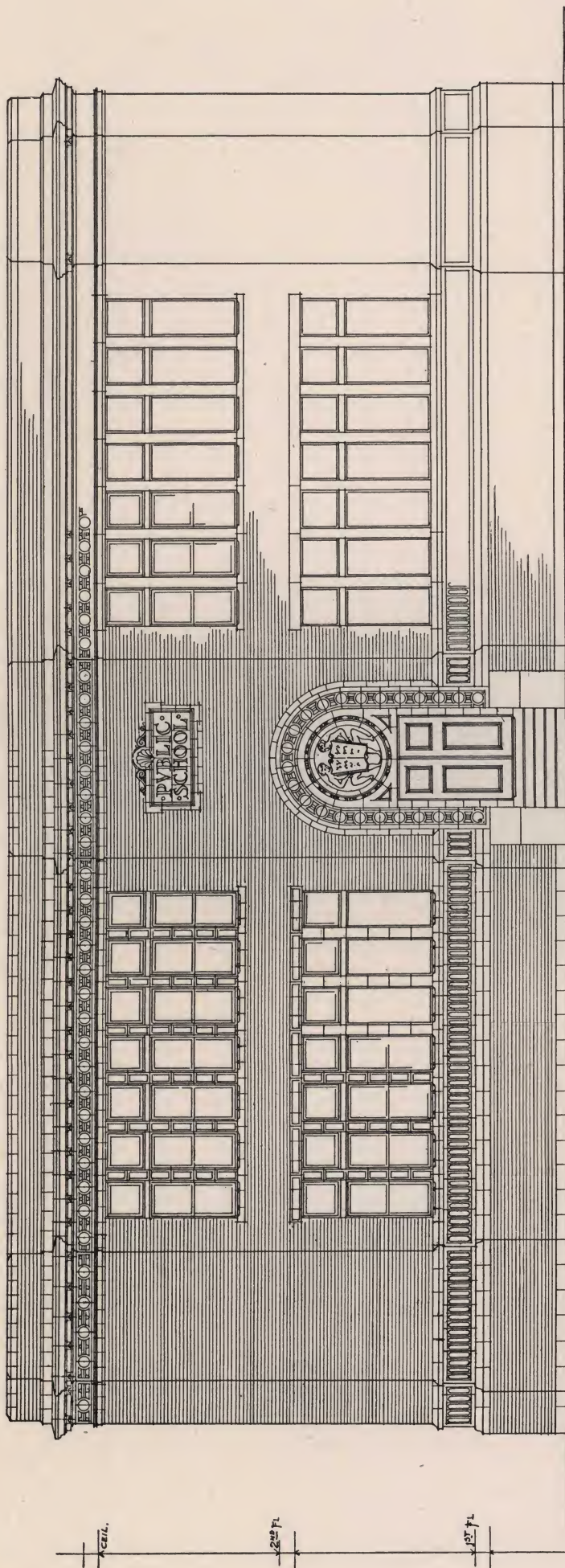
A COMBINATION of architectural terra cotta with ledge or field stone. It should be noted that the materials are treated absolutely irrespective of each other, without any attempt at imitation. The trim for doorway is a frank insertion of architectural terra cotta, and was not designed to look like stone. For another example showing a similar use of architectural terra cotta with unworked stone, see page 8.

SCALE OF ELEVATION

SCALE OF PLAN

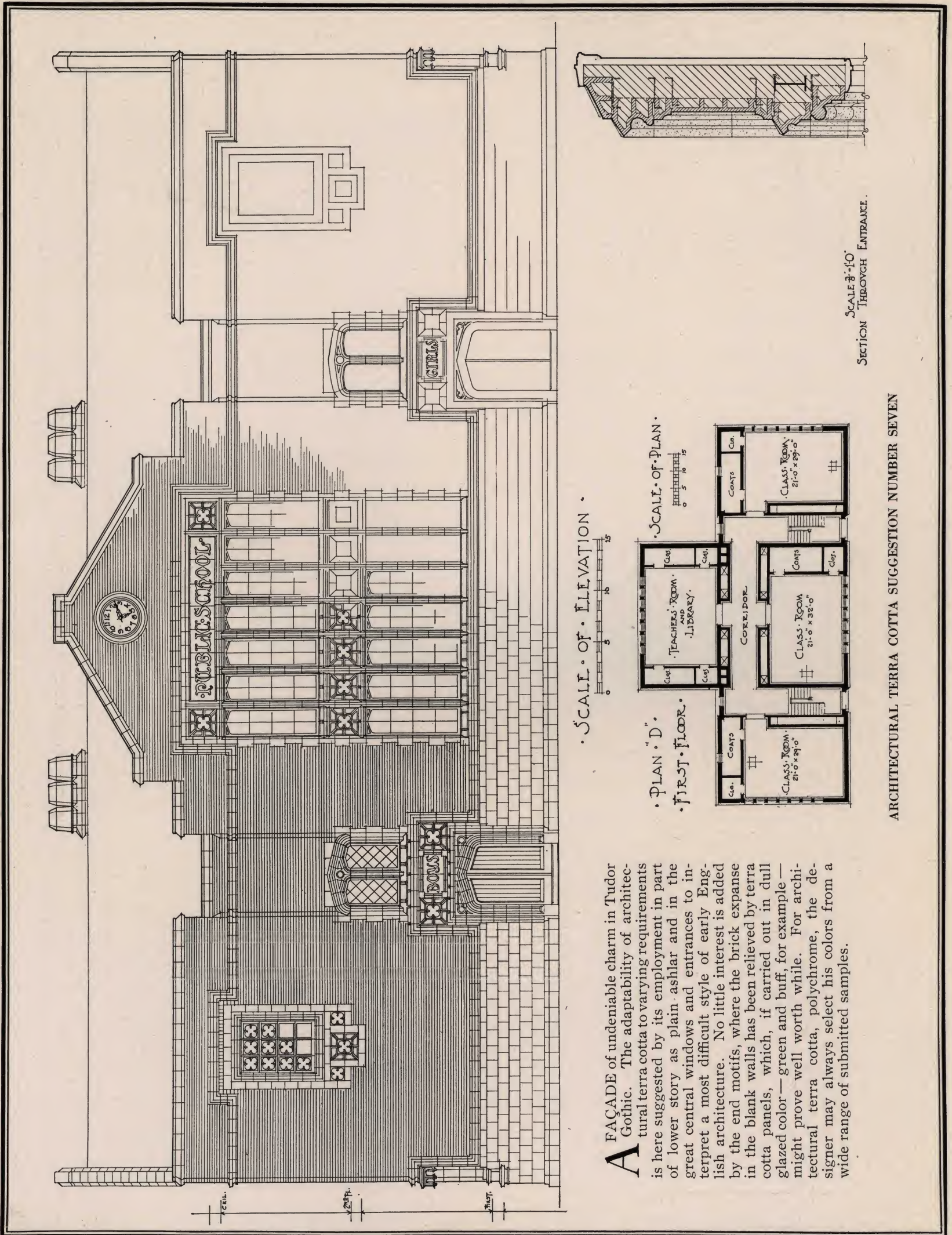
SCALE $\frac{1}{4}$ " = 1'-0"
SECTION THROUGH CORNICE AT MODILLION

ARCHITECTURAL TERRA COTTA SUGGESTION NUMBER FIVE



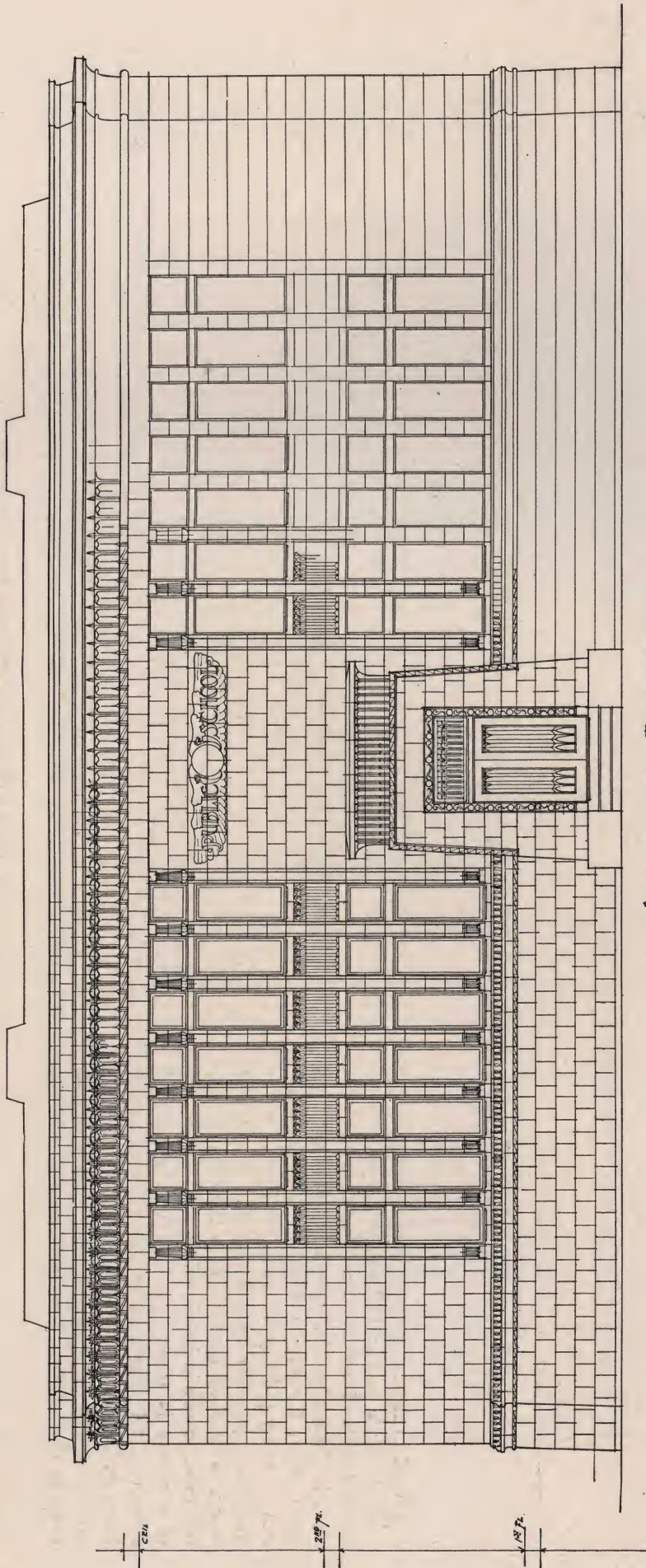
A SCHOOLHOUSE of eight class rooms and a small auditorium with façade of architectural terra cotta and brick. The simplicity of the plan is echoed in the general design, which is both strong and dignified. The most noteworthy terra cotta feature is the treatment of the windows. The stone sections so commonly used, irrespective of the material, have here been discarded for something more suggestive of architectural terra cotta. This idea has been worked out successfully by jointing and paneling the mullions — a requirement of prohibitive cost in modern machine-made stone, but representing no great outlay in architectural terra cotta.

ARCHITECTURAL TERRA COTTA SUGGESTION NUMBER SIX



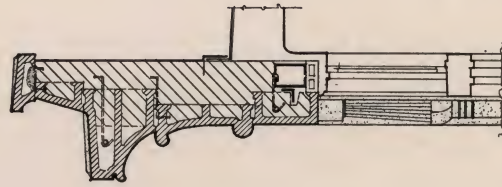
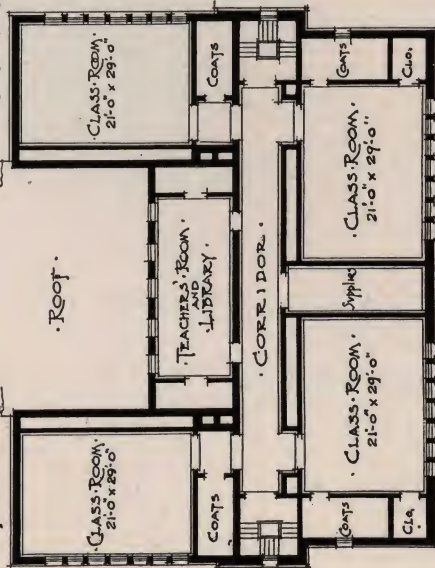
A FAÇADE of undeniable charm in Tudor Gothic. The adaptability of architectural terra cotta to varying requirements is here suggested by its employment in part of lower story as plain ashlar and in the great central windows and entrances to interpret a most difficult style of early English architecture. No little interest is added by the end motifs, where the brick expanse in the blank walls has been relieved by terra cotta panels, which, if carried out in dull glazed color — green and buff, for example — might prove well worth while. For architectural terra cotta, polychrome, the designer may always select his colors from a wide range of submitted samples.

ARCHITECTURAL TERRA COTTA SUGGESTION NUMBER SEVEN



SCALE OF ELEVATION

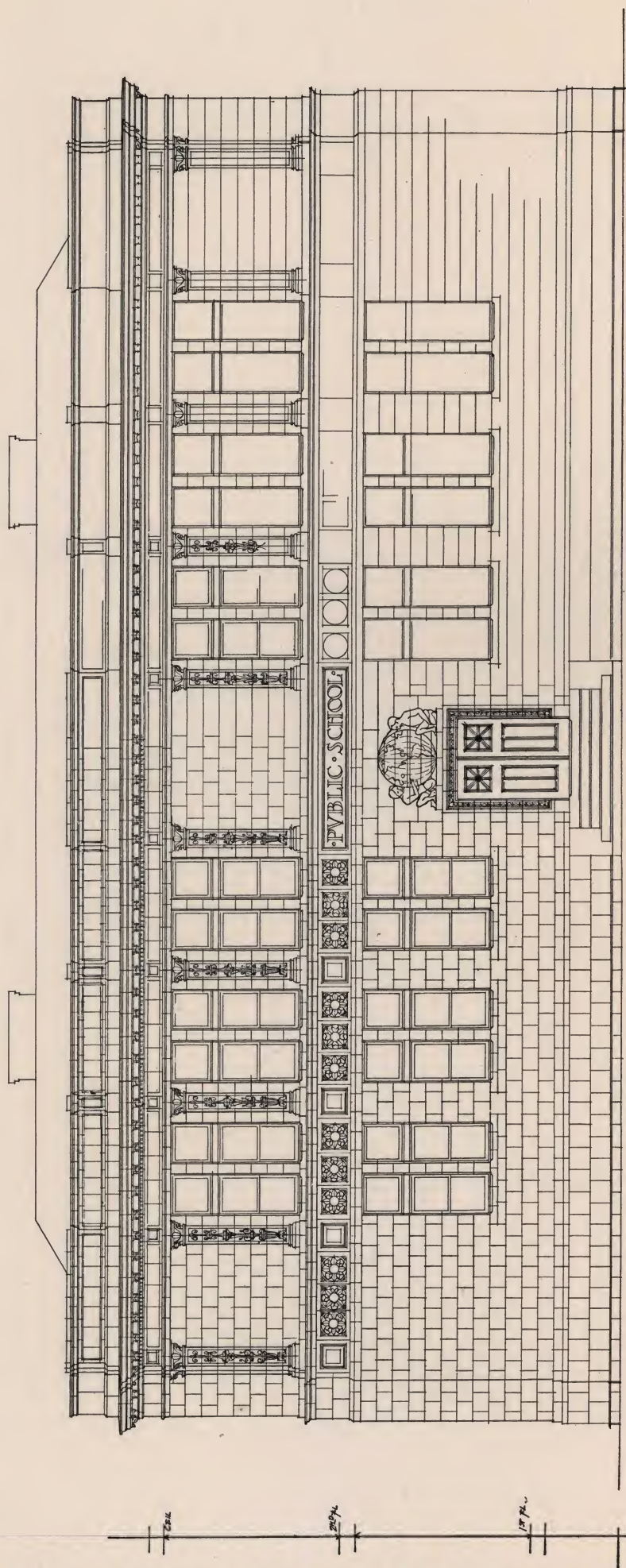
PLAN OF SECOND FLOOR



SCALE 1/4" = 1'-0"
SECTION THROUGH CORNICE

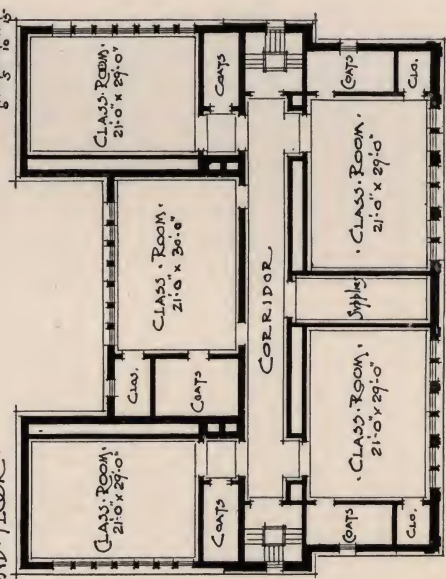
A SCHOOLHOUSE facade designed entirely for architectural terra cotta, the exterior arrangement and details of which somewhat suggest Egyptian traditions. The ample lighting area and the impressive expanse of wall surface seem to indicate the practicability of the design. As an opportunity in architectural terra cotta, particularly in polychrome, the field here is almost unlimited. While the background could probably be best treated in but one color, much of the detail — like parts of the cornice, the decorative window mullions, and the doorway — might be satisfactorily enriched by the use of several soft and harmonious colors.

ARCHITECTURAL TERRA COTTA SUGGESTION NUMBER EIGHT



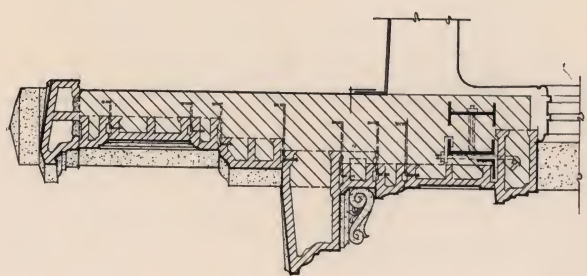
SCALE OF ELEVATION.

PLAN, F. SECOND FLOOR.

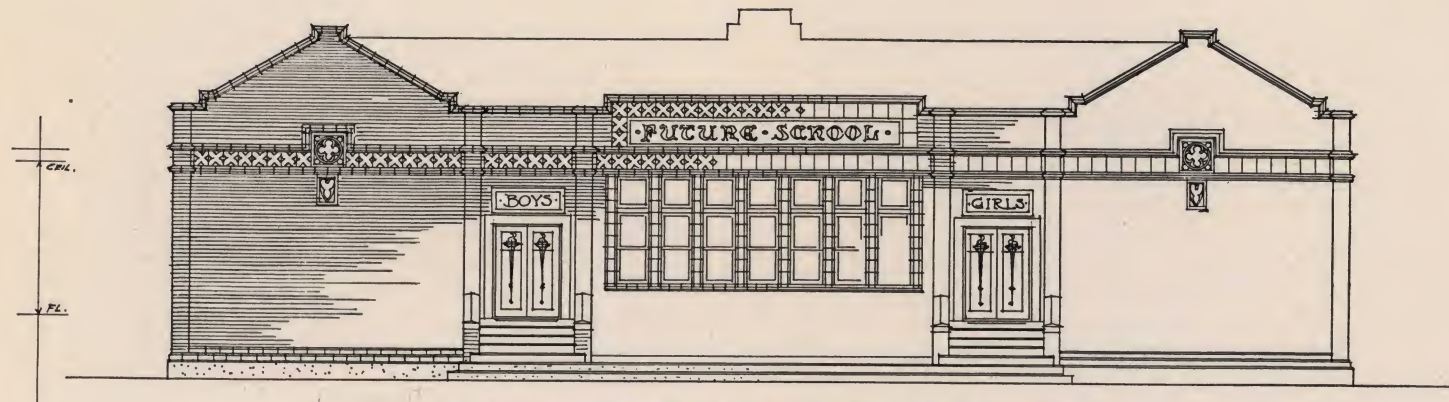


ARCHITECTURAL TERRA COTTA SUGGESTION NUMBER NINE

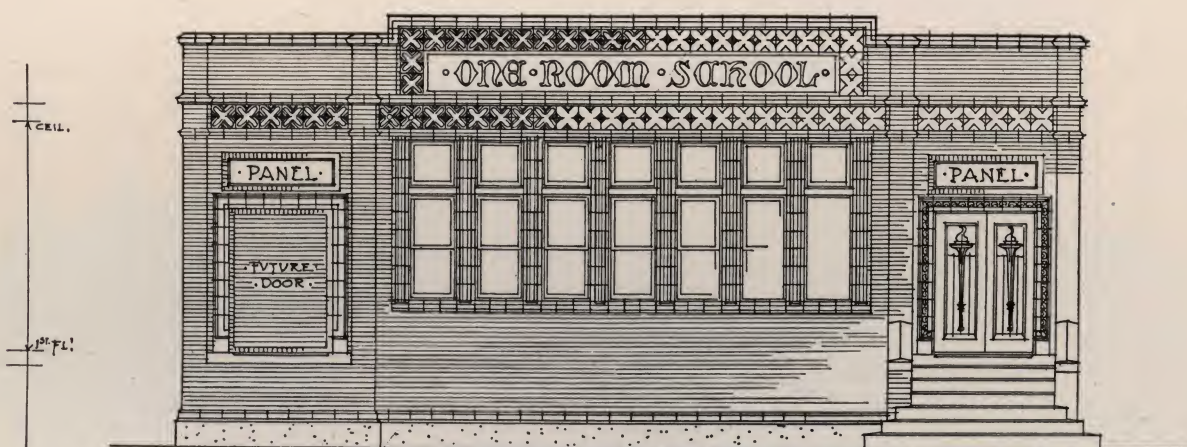
THE ornamental features are designed in the style of the Italian Renaissance, with entire façade of architectural terra cotta. This style is always best interpreted by architectural terra cotta, for only a highly plastic material can correctly portray the great fertility of ornamentation peculiar to this period. The lower story, in marked contrast with the other parts, is almost severe in its simplicity. This scheme of contrast is often designed for the twofold reason that it suggests greater solidity at the base, and, as a strictly practical point, protects all the ornament from accidental damage and from vandalism.



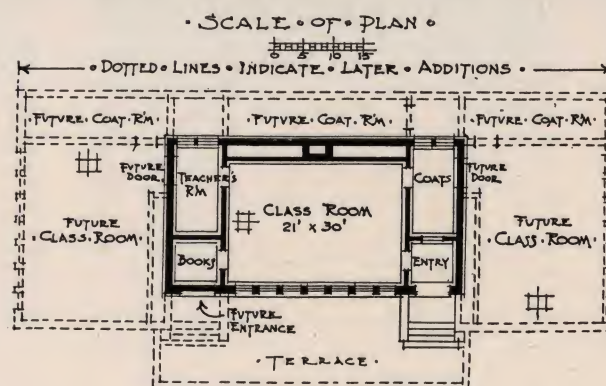
SECTION THROUGH PARAPET AND ENTABLATURE. SCALE 3/4"=1'-0"



• ELEVATION • OF • COMPLETED • BUILDING •
• SCALE • 0 5 10 15 FEET •



• ELEVATION • OF • FIRST • STRUCTURE •
• SCALE • 0 5 10 15 FEET •



IN some sections of the country the problem of authorizing the construction of necessary schools, in spite of the ever present limit of municipal expenditures, has been met in a very practical and successful way by the adoption of the unit system of planning a schoolhouse. By this method a modest one-room schoolhouse of good design may be enlarged by the addition of other units as necessity requires and funds permit. This, too, is accomplished without affecting architectural beauty or balance, but rather by adding to both.

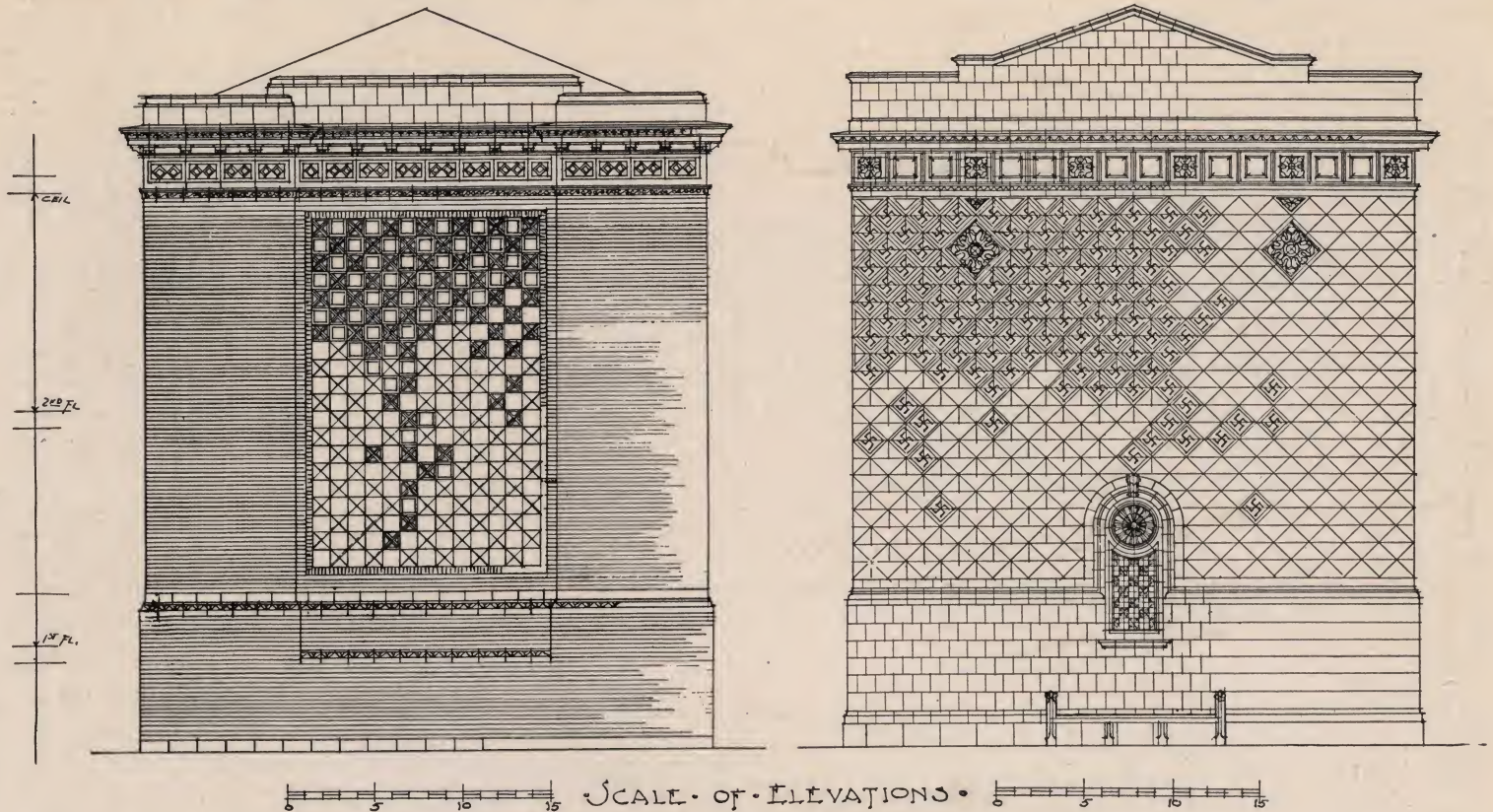
Of course, in the preliminary plans, the completed building is the ultimate aim, but the various units are so disposed that any one or more, when constructed, will present a pleasing exterior appear-

ance in themselves.

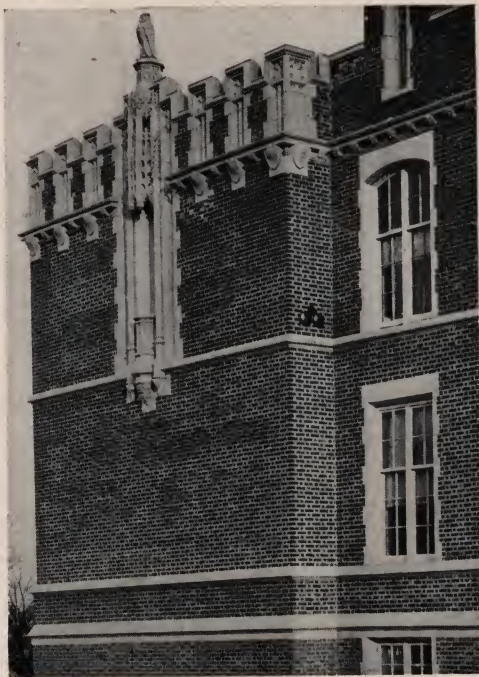
From the standpoint of economy, the unit plan offers the smaller communities a practical method of providing proper school facilities for an increasing population, without making a large investment at any one time and with due respect always to the demands of good architecture.

Architectural terra cotta is especially adapted to the construction of this kind of old and new work. The existing material can be easily matched in color and texture, and — where the architect designs all ornamentation of the building in simple units that can be reproduced from same moulds — no new models may be required for the additional work when the building is enlarged.

THE ONE ROOM SCHOOL, UNIT PLAN



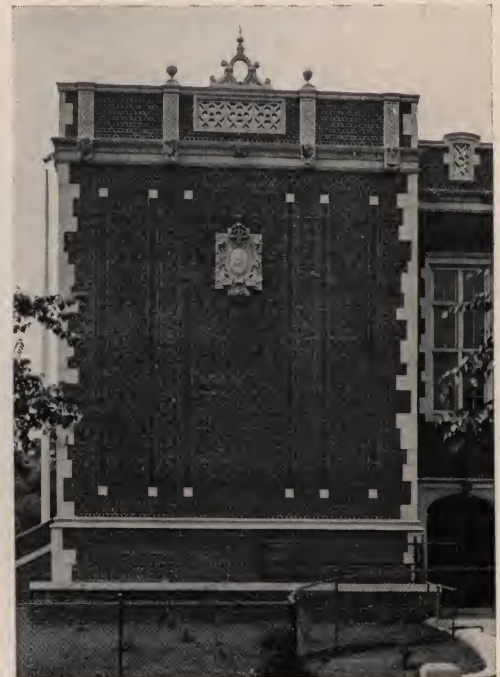
Two Suggestions for Decorating Blank Walls with Architectural Terra Cotta



Detail — South Side High School, Newark, N. J.
E. F. Guilbert, Architect



Detail — University of Cincinnati
Tietig & Lee and Garber & Woodward, Associate Architects



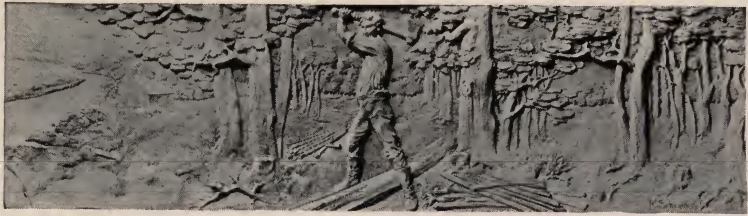
Detail — Normal School, Newark, N. J.
E. F. Guilbert, Architect

THE type of schoolhouse characterized by unilateral lighting has been developed to meet the demands of teachers and oculists who claim to have discovered that many school children are suffering from defective eyesight due to badly lighted rooms. This type has introduced several difficulties for architects to overcome. The resulting blank walls must be handled skilfully, and both harmony and balance must be sought in a new way, in order to introduce sufficient light from the proper source and in the right way. However, this blank wall is a feature that can be

ornamental as well as useful. Some designers have realized the possibility of making it decorative by use of patterned brickwork, sometimes studded with tiles; but few seem to have fully appreciated the novel chance offered for complete architectural terra cotta treatment. Indeed, it would seem that here is an interesting opportunity to turn the very limitations of the material to advantage; for these wall surfaces offer architectural possibilities that suggest novel and artistic achievements by employing decorative patterning in polychromatic or plain architectural terra cotta.

BLANK WALLS IN SCHOOLHOUSE ARCHITECTURE

ARCHITECTURAL TERRA COTTA BROCHURE SERIES — THE SCHOOL

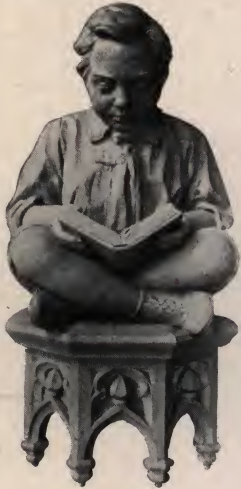


Rail Splitter



The Lincoln-Douglas Debate

The Four Lincoln Panels shown at Top and Bottom of this Page made for Lincoln Memorial Hall
University of Illinois, Champaign, Ill.
W. C. Zimmerman, Architect



Detail
School, Cincinnati, O.
Garber & Woodward, Architects



Terra Cotta
Detail
School — Cincinnati, O.
Garber & Woodward, Architects



Detail
School, Cincinnati, O.
Garber & Woodward, Architects



Grotesque by
Elmer L. Gerber
Architect



Terra Cotta Detail — Jonesmore School, Portland, Ore.
F. A. Naramore, Architect



Grotesque by
Elmer L. Gerber
Architect



Detail by Elmer L. Gerber, Architect



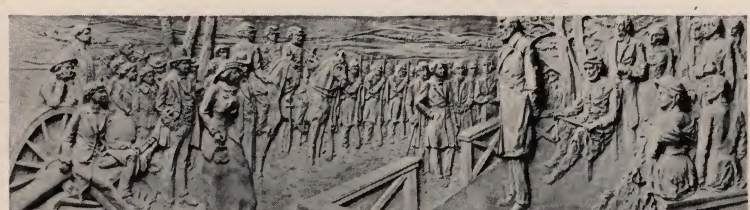
Detail
Georgetown Law School, Georgetown
A. P. Clark, Jr., Architect



Terra Cotta Detail
School, Cincinnati, O.
Garber & Woodward, Architects



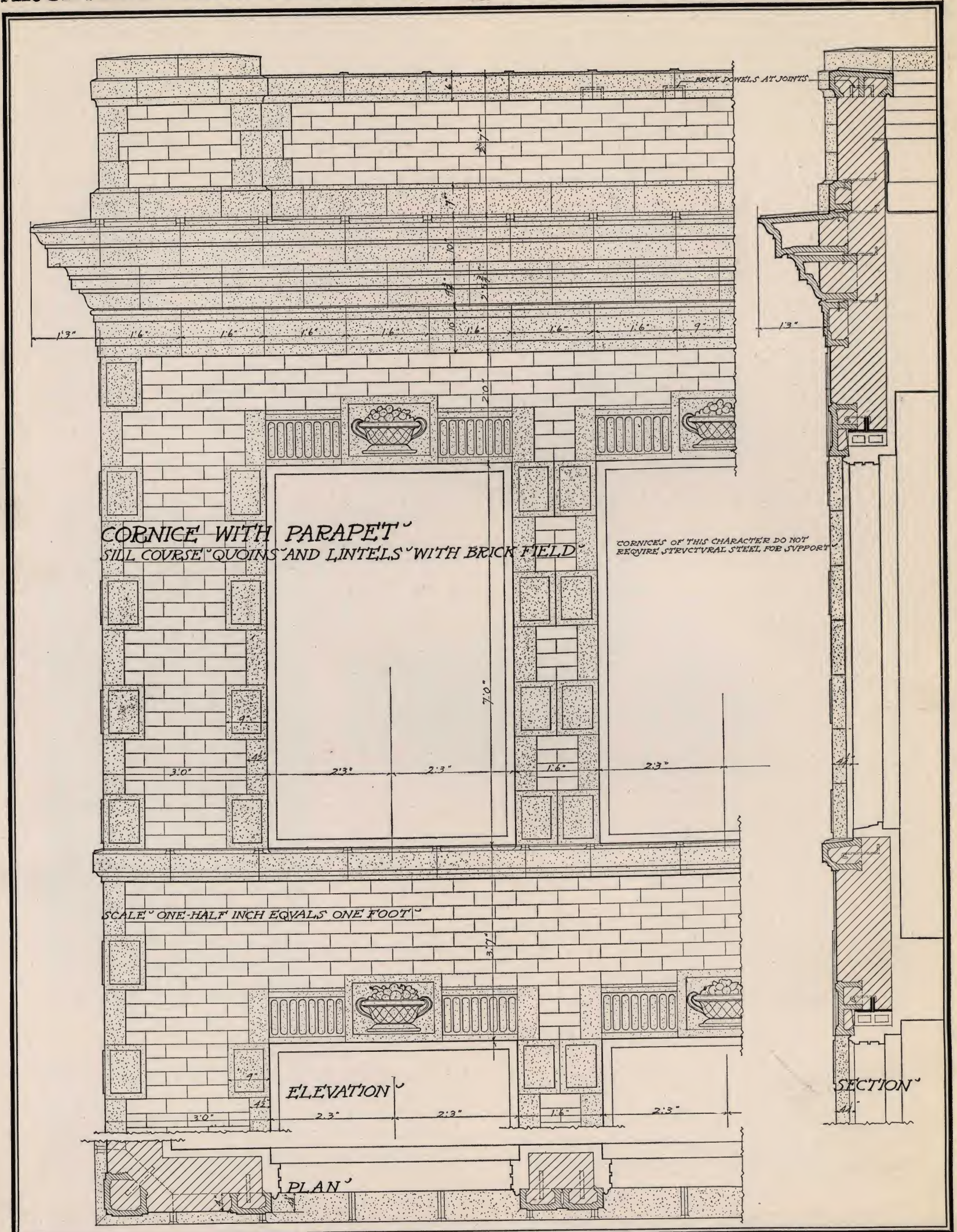
The Inauguration



Gettysburg Speech

ARCHITECTURAL TERRA COTTA DETAILS SELECTED FROM RECENT SCHOOL BUILDINGS

ARCHITECTURAL TERRA COTTA · · · STANDARD CONSTRUCTION



The construction plate on opposite page is one
of seventy-two full-page drawings shown in

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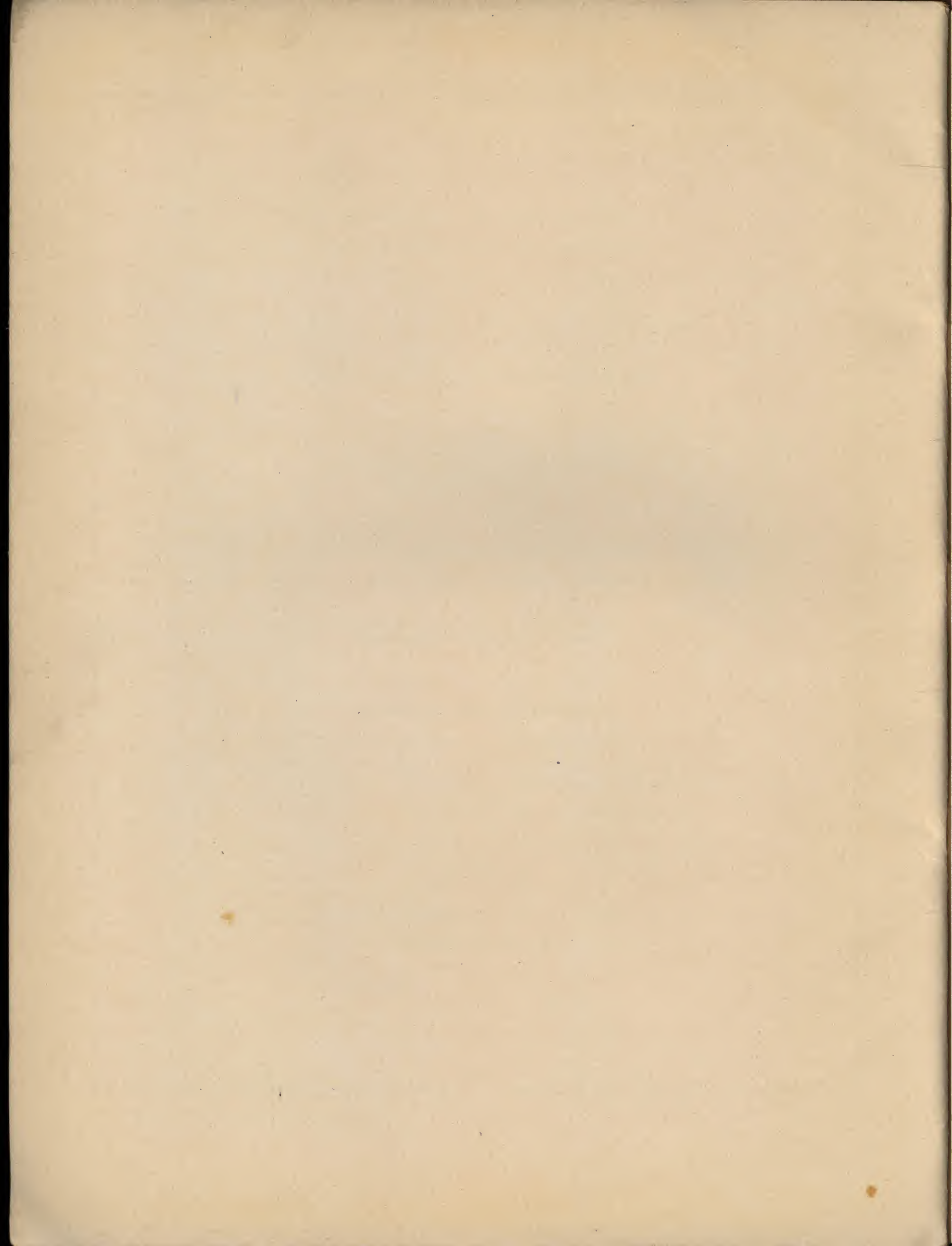
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